



May 4, 2016

A Tentative Program of WCCM XII & APCOM VI

Dear Congress Participants,

The main purpose of this release is to help congress participants **planning and booking their travel to Seoul in advance** because the end of July is a peak season for summer vacation.

You can first check the whole congress program at a glance, which mainly consists of 13 Plenary Lectures, 23 Semi-plenary Lectures, and more or less 300 Parallel Sessions. Then, find the date and time of your presentation by simply searching your abstract number. Please note that this tentative program only includes early-registered abstracts for oral or poster presentations.

For those who haven't yet registered, regular-registration is still open. However, your abstract will be assigned to the remaining slots of oral presentation sessions or moved to poster sessions.

From now on, we shall minimize the change of this program to secure the existing schedule of congress participants. We really appreciate your understanding and cooperation to the seamless operation of the congress program.

If you have any question regarding the congress program (except personal scheduling request), feel free to contact the Secretariat of WCCM XII & APCOM VI.

Best Regards,

The Secretariat of WCCM XII & APCOM VI

Tel. +82-70-5101-5426/ Fax. +82-70-4369-5430/ E-mail. secretariat@wccm2016.org



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■ Program at a Glance

Time	7/24(Sun)	7/25(Mon)	7/26(Tue)	7/27(Wed)	7/28(Thu)	7/29(Fri)	
8:30 - 10:00		Opening Ceremony + Plenary 1	Plenary 2 Plenary 3 Plenary 4	Plenary 5 Plenary 6 Plenary 7	Plenary 8 Plenary 9 Plenary 10	Parallel Session 12	
10:00 - 10:30		Coffee Break					Coffee Break
10:30 - 11:00		Coffee Break					Plenary 11 Plenary 12
11:00 - 11:50		Parallel Session 1	Parallel Session 4	Parallel Session 7	Parallel Session 10		
11:50 - 12:30		Lunch					Plenary 13 + Closing Ceremony
12:30 - 13:00							
13:00 - 14:00							
14:00 - 15:00	Registration	Semi-Plenary 1 - 6	Semi-Plenary 7 - 12	Semi-Plenary 13 - 18	Semi-Plenary 19 - 24		
15:00 - 15:30		Coffee Break					
15:30 - 17:00		Parallel Session 2	Parallel Session 5	Parallel Session 8	Parallel Session 11		
17:00 - 17:15		Short Break – no coffee					
17:15 - 18:45		Parallel Session 3	Parallel Session 6	Parallel Session 9			
19:00 - 21:00	Welcome Reception				Banquet		

■ Plenary Lecture Schedule

No.	Name	Date	Start Time	-	Finish Time	Room No.	Presentation Time(Minute)	Title
PL1	J. Tinsley Oden	7/25(Mon)	9:50	-	10:30	GBR	40	Foundations of Predictive Computational Science: Selection and Validation of Predictive Models of Complex Systems
PL2	Eugenio Oñate	7/26(Tue)	8:30	-	9:10	GBR	40	Finite Increment Calculus (FIC). A paradigm for increased accuracy in Computational Mechanics
PL3	Barbara Wohlmuth	7/26(Tue)	9:10	-	9:50	GBR	40	TBD
PL4	Yoon Young Kim	7/26(Tue)	9:50	-	10:30	GBR	40	Numerical Synthesis of Linkage Mechanisms by Topology Optimization
PL5	Peter Wriggers	7/27(Wed)	8:30	-	9:10	GBR	40	A Multiscale Approach for Modeling Thermoplastic Material Behavior of Dual – Phase Steels – From Microscopic to Macroscopic Length Scale
PL6	Yao Zheng	7/27(Wed)	9:10	-	9:50	GBR	40	Towards Extreme Scale Computing with High End Digital Prototyping
PL7	Jacob Fish	7/27(Wed)	9:50	-	10:30	GBR	40	Computational Continua Multiscale Framework
PL8	J. S. Chen	7/28(Thu)	8:30	-	9:10	GBR	40	Fracture to Damage Multiscale Modeling and Application to Extreme Events Simulation
PL9	Seiichi Koshizuka	7/28(Thu)	9:10	-	9:50	GBR	40	Moving Particle Semi-implicit Method in Computational Fluid Dynamics: Basic Studies and Application to Industry
PL10	Chuin-Shan (David) Chen	7/28(Thu)	9:50	-	10:30	GBR	40	When waves do not spuriously reflect: dynamic multiscale method and applications
PL11	Marek Behr	7/29(Fri)	10:30	-	11:10	GBR	40	Complex Fluids in Production and Biomedical Engineering
PL12	Nasser Khalili	7/29(Fri)	11:10	-	11:50	GBR	40	A Coupled Hydro-Mechanical Model for Unsaturated Soils Including Hydraulic and Mechanical Hystereses
PL13	Thomas J.R. Hughes	7/29(Fri)	11:50	-	12:30	GBR	40	Isogeometric Analysis: Past, Present, Future

■ Semi-Plenary Lecture Schedule

No.	Name	Date	Start Time	-	Finish Time	Room No.	Presentation Time(Minute)	Title
SPL1	Tarun Kant	7/25(Mon)	14:00	-	14:30	GBR1	30	Evolution of macro-mechanics of laminated composites
SPL2	Zhuo Zhuang	7/25(Mon)	14:00	-	14:30	GBR3	30	Fracking Modeling in Shale by 3D Fluid-Biot-Fracture Interaction
SPL3	Marc Geers	7/25(Mon)	14:00	-	14:30	GBR5	30	From Emergence to Metamaterials in Multiscale Computational Mechanics
SPL4	Zishun Liu	7/25(Mon)	14:30	-	15:00	GBR1	30	TBD
SPL5	Takayuki Aoki	7/25(Mon)	14:30	-	15:00	GBR3	30	Large-scale Complex Flow Simulations using Particle and Mesh Methods on a GPU supercomputer
SPL6	Maenghyo Cho	7/25(Mon)	14:30	-	15:00	GBR5	30	Multiscale Opto-mechanical Design and Realization of Photo-responsive Materials : DFT, MD, and Continuum Simulations Integrated
SPL7	Moon Kyum Kim	7/26(Tue)	14:00	-	14:30	GBR1	30	TBD
SPL8	Shinji Nishiwaki	7/26(Tue)	14:00	-	14:30	GBR3	30	A new topology optimization and its application to mechanical, electromagnetic and material designs
SPL9	Ellen Kuhl	7/26(Tue)	14:00	-	14:30	GBR5	30	Neuromechanics - Challenges and Opportunities
SPL10	Daigoro Isobe	7/26(Tue)	14:30	-	15:00	GBR1	30	A Finite Element Approach to Analyze Large-Scale Collapse Behaviors of Buildings and Motion Behaviors of Non-Structural Components
SPL12	Yuan Tong Gu	7/26(Tue)	14:30	-	15:00	GBR5	30	Experimental and numerical exploration of deformability and aging of red blood cells
SPL13	Somnath Ghosh	7/27(Wed)	14:00	-	14:30	GBR1	30	Computational Framework Involving Spatial and Temporal Multi-Scaling for Coupled Transient Electromagnetics-Mechanical Phenomena
SPL14	Michael Kaliske	7/27(Wed)	14:00	-	14:30	GBR3	30	Tire-Pavement-Interaction: Material Modelling, Adapted FE-Formulations, Polymorphic Uncertainties
SPL15	Xu Guo	7/27(Wed)	14:00	-	14:30	GBR5	30	Doing Topology Optimization Explicitly and Geometrically Based on Moving Morphable Components (MMC) approach— A New Paradigm
SPL16	Alain Combescure	7/27(Wed)	14:30	-	15:00	GBR1	30	About symmetries in structural mechanics: beauty and pitfalls
SPL17	Naoki Takano	7/27(Wed)	14:30	-	15:00	GBR3	30	Applications of stochastic multiscale modeling of inter- and intra-individual differences
SPL18	Chang-Ock Lee	7/27(Wed)	14:30	-	15:00	GBR5	30	A dual iterative substructuring method with a penalty term and parallel inner problems
SPL19	Sergio R. Idelsohn	7/28(Thu)	14:00	-	14:30	GBR1	30	Are we using the mesh as coarse as possible and the maximum time-step necessary to efficiently solve a particular problem?
SPL20	Tae Hee Lee	7/28(Thu)	14:00	-	14:30	GBR3	30	TBD
SPL21	Gui-Rong Liu	7/28(Thu)	14:00	-	14:30	GBR5	30	Meshfree Methods: Strong, Weak, Weak-Strong and Weakened Weak (W2) formulations
SPL22	Takizawa Kenji	7/28(Thu)	14:30	-	15:00	GBR1	30	Space-Time Methods and Isogeometric Discretization in Computational Engineering Analysis
SPL23	Harold S. Park	7/28(Thu)	14:30	-	15:00	GBR3	30	New Approaches for Atomistic Simulations at Long Timescales and Slow Strain Rates
SPL24	Paulo M. Pimenta	7/28(Thu)	14:30	-	15:00	GBR5	30	Recent advances on the analysis of flexible structures

■ Mini-Symposium Schedule

- Biological Systems (MS001~MS099)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS001	1	7/25(Mon)	11:00	11:15	301A	15	1	152075	A generalized two-sex logistic model	Laurentiu M Segal
MS001	1	7/25(Mon)	11:15	11:30	301A	15	2	152065	The impact of risk-taking in epidemic models.	Daniel Maxin
MS001	1	7/25(Mon)	11:30	11:45	301A	15	3	151816	A Two-strain Spatio-temporal Mathematical Model of Tumor Growth	Fabio Augusto Milner
MS001	1	7/25(Mon)	11:45	12:00	301A	15	4	151711	The numerical simulation investigation on the optimized evolution micro-structure based on the biological porous dentine	Hong Zuo
MS001	1	7/25(Mon)	12:00	12:15	301A	15	5	151682	Geographically accurate simulation of invasive species dispersal	Luca Gerardo Giorda
MS001	1	7/25(Mon)	12:15	12:30	301A	15	6	151248	Numerical Simulations of Korean Population for years 2015~2065 by Parameter Estimations	Younhee Lee
MS003	1	7/25(Mon)	15:30	16:00	318A	30	1	152183	Material Models, Deformation and Failure of Hydrated Cement Paste at Nanoscale	Ram Mohan
MS003	1	7/25(Mon)	16:00	16:15	318A	15	2	151988	Multiscale Optimization for Porous Dental Implants	Wei Li
MS003	1	7/25(Mon)	16:15	16:30	318A	15	3	150530	A Continuum Modeling of Dislocation and Surface Roughening in Heteroepitaxial Structures	Liyuan Wang
MS003	1	7/25(Mon)	16:30	16:45	318A	15	4	150194	Intrinsic Interaction between Twin Boundaries and Screw Dislocations in FCC Metals	Jiayong Zhang
MS003	1	7/25(Mon)	16:45	17:00	318A	15	5	150797	Design, Evaluation, and Optimization of Stent-graft performance by Computational Mechanics	Fangsen Cui
MS003	2	7/25(Mon)	11:00	11:30	304	30	1	152188	Predicting Fatigue Crack Initiation Life of Polycrystalline Metals Using Crystal Plasticity	Luming Shen
MS003	2	7/25(Mon)	11:30	11:45	304	15	2	150228	Thermal-Electric-Mechanical Coupling Flow Properties of Fluids in/on the Low Dimensional Carbon Materials	Zhong-Qiang ZHANG
MS003	2	7/25(Mon)	11:45	12:00	304	15	3	150711	MD Simulations on the Deformable Salt Water-Filled Carbon Nanotubes Driven by Electric Field	Hongfei Ye
MS003	2	7/25(Mon)	12:00	12:15	304	15	4	151288	Three dimensional numerical simulation of peripheral resistance of coronary microcirculation	Shohei Hodota
MS003	2	7/25(Mon)	12:15	12:30	304	15	5	150927	A Numerical Method for the Oxygen Transfer Efficiency in Microcirculatory System at Cellular Scale	Xiaobo Gong
MS004	1	7/25(Mon)	11:00	11:15	307BC	15	1	150096	Polymorphic transformation of bacterial flagella during locomotion	Sookkyung Lim
MS004	1	7/25(Mon)	11:15	11:30	307BC	15	2	150408	Effect of Fluid Resistance on Sperm Motility	Sarah Dianne Olson
MS004	1	7/25(Mon)	11:30	11:45	307BC	15	3	151889	A Parameter Study on a Mathematical Model of Cellular Blebbing	Wanda Strychalski
MS004	1	7/25(Mon)	11:45	12:00	307BC	15	4	151471	Virtual Contrast Modeling Based on PC-MRI Flow Measurements	Vitaliy L. Rayz
MS004	1	7/25(Mon)	12:00	12:15	307BC	15	5	150724	Modeling of sperm and cilia motility in viscoelastic environments	Robert Dillon
MS004	1	7/25(Mon)	12:15	12:30	307BC	15	6	151108	Analysis of Rotational Switching Mechanism of Flagellar Motor Protein	Moon-Ki Choi
MS004	2	7/25(Mon)	15:30	15:45	301A	15	1	151512	Sharp-Interface Immersed Boundary Methods for Simulating Cardiovascular Fluid-Structure Interaction	Boyce E. Griffith

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS004	2	7/25(Mon)	15:45	16:00	301A	15	2	151487	The Role of Myosin II in Glioma Invasion Using the Immersed Boundary Method	Wanho Lee
MS004	2	7/25(Mon)	16:00	16:15	301A	15	3	151518	Vessel Growth, Blood Flow and Drug Delivery in Tumor Angiogenesis	Tae-Rin Lee
MS004	2	7/25(Mon)	16:15	16:30	301A	15	4	151957	A CFD Analysis Framework for Stroke Risk Assessment in Subjects with Pediatric Cerebrovascular Disease	Shaolie S Hossain
MS004	2	7/25(Mon)	16:30	16:45	301A	15	5	152298	Numerical Study on CHS Using 1D-0D Model of the Cardiovascular System	Hao Zhang
MS005	1	7/25(Mon)	15:30	15:45	304	15	1	150925	An advanced numerical model for understanding the deformability of healthy and infected red blood cells	YuanTong Gu
MS005	1	7/25(Mon)	15:45	16:00	304	15	2	151146	Collective Cell Migration in a Monolayer With Heterogeneity	Shao-Zhen Lin
MS005	1	7/25(Mon)	16:00	16:15	304	15	3	151496	Drug delivery in Tumor A Poroelastic Model of Tumor Interstitium	Shi-Lei Xue
MS005	1	7/25(Mon)	16:15	16:30	304	15	4	150745	Development of a Constitutive Multi-scale Region Specific Nested Finite Element Model of the Plantar Soft Tissue	Peng Zhan
MS005	1	7/25(Mon)	16:30	16:45	304	15	5	151264	Nanomechanics of Amyloid Fibrils	Bumjoon Choi
MS005	1	7/25(Mon)	16:45	17:00	304	15	6	151263	What determines the structure of amyloid fibrils?	Kilho Eom
MS006	1	7/25(Mon)	17:15	17:30	304	15	1	150555	Modeling the Mechanisms of Axonal Elongation by Molecular Motors	Rijk de Rooij
MS006	1	7/25(Mon)	17:30	17:45	304	15	2	151893	Modeling the Mechanics of Axonal Fiber Tracts using the Embedded Element Method	Reuben Kraft
MS006	1	7/25(Mon)	17:45	18:00	304	15	3	151678	Development of Infant and Child Head FE Models	Chiara Giordano
MS006	1	7/25(Mon)	18:00	18:15	304	15	4	151335	Investigating the Mechanical Micro-structure of Brain Tissues	Johannes Weickenmeier
MS007	1	7/28(Thu)	11:00	11:30	307BC	30	1	152059	New Mechanics Insights from Marine Glass Fibers	Haneesh Kesari
MS007	1	7/28(Thu)	11:30	11:45	307BC	15	2	152170	Damage Detection of Structures with Multifractal Detrended Cross-Correlation Analysis	Chien Yi Hsiu
MS007	1	7/28(Thu)	11:45	12:00	307BC	15	3	151954	Multi-hit damage and perforation of metallic plates inspired by the attack of the Mantis Shrimp	Paolino De Falco
MS007	1	7/28(Thu)	12:00	12:15	307BC	15	4	151572	Full Atomistic Modeling of Novel Waterborne Biodegradable Polyurethane Hydrogel for 3D Printing	Chien-Hui Wen
MS007	1	7/28(Thu)	12:15	12:30	307BC	15	5	151348	Modeling and 3D Printing of Nacre-Inspired Composites	Youngsoo Kim
MS007	2	7/28(Thu)	15:30	16:00	301A	30	1	150959	Spider web inspired mechanical metamaterials	Marco Miniaci
MS007	2	7/28(Thu)	16:00	16:15	301A	15	2	151958	Numerical simulations of growth and self-healing effects in biological tissue	Federico Bosia
MS007	2	7/28(Thu)	16:15	16:30	301A	15	3	151690	Micromechanics Study on the Effective Mechanical Properties of Reinforced Silk with Graphene or Carbon Nanotubes	Sangryun Lee
MS007	2	7/28(Thu)	16:30	16:45	301A	15	4	151498	Multiscale modeling of normal and brittle bone collagen fibril: molecular origin of brittle bone disease	Shu-Wei Chang
MS007	2	7/28(Thu)	16:45	17:00	301A	15	5	151251	c-axis Preferential Orientation of Hydroxyapatite Accounts for The High Wear Resistance of The Teeth of Black Carp	HAIMIN YAO
MS009	1	7/26(Tue)	11:00	11:15	304	15	1	150097	Computational Modeling of Blood Flow Induced Sound and Vibration	Jung Hee Seo
MS009	1	7/26(Tue)	11:15	11:30	304	15	2	151422	Analysis of Homologous Recombination Process in a DNA Foldback Intercoil Structure by an Elastic Network Model	Soojin Jo

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS009	1	7/26(Tue)	11:30	11:45	304	15	3	152184	Computational Modeling of Nucleic and Peptide Aptamer Interactions in Biosensor Applications - IL6 Traumatic Brain Injury Biomarker	Kristen Rhinehardt
MS009	1	7/26(Tue)	11:45	12:00	304	15	4	150812	The Water Permeability of Aquaporin-Z in Various Membranes by Molecular Dynamics Simulations.	Young Jin Kim
MS009	1	7/26(Tue)	12:00	12:15	304	15	5	150286	Computational Simulation of Non-linear Bone Remodeling Induced by Different Fixed Partial Denture Designs	Zhipeng Liao
MS009	1	7/26(Tue)	12:15	12:30	304	15	6	151110	Vibrational Characteristics of DNA 2D Ring and 3D Bulky Ball	Byung Ho Lee
MS010	1	7/25(Mon)	17:15	17:45	GBR1	30	1	151803	The Biomechanical Rupture Risk Assessment of Abdominal Aortic Aneurysms. Computational algorithms tailored for clinical decision making	T.Christian Gasser
MS010	1	7/25(Mon)	17:45	18:00	GBR1	15	2	150837	Investigation of the Micromechanics of a Myocardial Infarct with Therapeutic Hydrogel Injectate during Diastole	Mazin S Sirry
MS010	1	7/25(Mon)	18:00	18:15	GBR1	15	3	151476	Multiscale modeling of traumatic brain injuries	Annaclaudia Montanino
MS010	1	7/25(Mon)	18:15	18:30	GBR1	15	4	151731	Fluid-Structure Interaction Simulation in Brain Blood Vessels	Aria Alimi
MS010	1	7/25(Mon)	18:30	18:45	GBR1	15	5	151352	On accurate and efficient simulations of multiple-network poroelastic modelling with applications to interstitial fluid flow in the human brain	Eleonora Piersanti
MS010	2	7/27(Wed)	11:00	11:30	GBR1	30	1	151948	Wall tension and abdominal aortic aneurysm rupture: Is it just correlation or is it also causation?	Madhavan L Raghavan
MS010	2	7/27(Wed)	11:30	11:45	GBR1	15	2	150575	Biomechanical modelling of the Achilles Tendon: which constitutive model to use?	Hanifeh Khayyeri
MS010	2	7/27(Wed)	11:45	12:00	GBR1	15	3	150741	Biomechanical model of dystrophic skeletal muscle	Jose F Rodriguez Matas
MS010	2	7/27(Wed)	12:00	12:15	GBR1	15	4	151283	Analysis of Muscle Activities around Hyoid Bone in Swallowing using Musculoskeletal Model	Takuya Hashimoto
MS010	2	7/27(Wed)	12:15	12:30	GBR1	15	5	152156	Micromechanics of Plastically Sliding Interfaces: Theoretical Foundations and Application to Bone	Viktoria Vass
MS010	3	7/27(Wed)	15:30	16:00	GBR1	30	1	151349	Robustness of common hemodynamics indicators with respect to numerical resolution in 38 middle cerebral artery aneurysms}	Kent-Andre Mardal
MS010	3	7/27(Wed)	16:00	16:15	GBR1	15	2	150361	Computing Time Reduction Methodology for Endovascular Repair Simulations	VICTOR A ACOSTA SANTAMARIA
MS010	3	7/27(Wed)	16:15	16:30	GBR1	15	3	150920	Strain-smoothed real-time explicit dynamic (STARTED) algorithm for soft tissue simulation	Changkye Lee
MS010	3	7/27(Wed)	16:30	16:45	GBR1	15	4	151808	Development of a three-dimensional multicompartmental poroelastic model for the simulation of cerebrospinal fluid transport	Liwei Guo
MS010	3	7/27(Wed)	16:45	17:00	GBR1	15	5	150746	Mechanobiological modeling of the nuclear pore complex	Alberto Garcia
MS010	4	7/26(Tue)	11:00	11:15	301A	15	1	152002	Pulmonary artery hemodynamics in pediatric subjects after Tetralogy of Fallot repair	Timothy K Chung
MS010	4	7/26(Tue)	11:15	11:30	301A	15	2	151468	Mathematical modeling of atheroma plaque formation and development. Effect of the hypertension effect on the plaque growth	Myriam Cilla
MS010	4	7/26(Tue)	11:30	11:45	301A	15	3	151951	Impact of material parameter uncertainty on stress in patient specific models of the heart	Joakim Sundnes
MS010	4	7/26(Tue)	11:45	12:00	301A	15	4	151972	Toward Automating Patient-Specific Stress Analysis From Medical Imaging	Omar Hafez
MS010	4	7/26(Tue)	12:00	12:15	301A	15	5	152297	Study of Drug Delivery Phenomena for Pancreatic Cancer via Coarse-Grained Simulation Method	Eunmin Go
MS011	1	7/26(Tue)	15:30	15:45	304	15	1	151026	Image-based computational simulation of swallowing	Kenji Shimokasa
MS011	1	7/26(Tue)	15:45	16:00	304	15	2	151540	Development of computational biomechanics of swallowing using Swallow Vision®	Yukihiro MICHIWAKI

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS011	1	7/26(Tue)	16:00	16:15	304	15	3	150707	Swallowing Examinations Using Computer Simulation to Understand the Mechanisms of Swallowing and Aspiration	Takahiro Kikuchi
MS011	1	7/26(Tue)	16:15	16:30	304	15	4	151736	Estimation of force on human organ during swallowing using swallowing simulator "Swallow Vision®" based on 3-dimensional MPS method	Tetsu Kamiya
MS011	1	7/26(Tue)	16:30	16:45	304	15	5	151053	Surface Model Construction from 4D-CT for Articulation Simulation	Kohei Hatanaka
MS011	1	7/26(Tue)	16:45	17:00	304	15	6	152110	Numerical Simulation of Phonation: a study of dynamic relevance of glottal jet asymmetry	Lucy T. Zhang
MS012	1	7/26(Tue)	17:15	17:30	304	15	1	151894	A Cortical Thickness Mapping Method for the Coxal Bone using Morphing	Matthew Panzer
MS012	1	7/26(Tue)	17:30	17:45	304	15	2	151851	Subject-Specific Finite Element Model of Thigh Specimen under Dynamic Bending Loading Condition	Gwansik Park
MS012	1	7/26(Tue)	17:45	18:00	304	15	3	151039	Computational Modeling of Blast-induced Injury of Lumbar Spine	Feng Zhu
MS012	1	7/26(Tue)	18:00	18:15	304	15	4	150934	Development of Traumatic Brain Injury Scaling Rules between Humans and Pigs	Robert N Saunders
MS012	1	7/26(Tue)	18:15	18:30	304	15	5	150803	Material Point Method Simulation of Ballistic Trauma	Kwitae Chong
MS013	1	7/27(Wed)	17:15	17:45	307BC	30	1	152181	Power Law Distribution and Noise within Complex Systems	Sheldon Wang
MS013	1	7/27(Wed)	17:45	18:00	307BC	15	2	152067	Computational analysis of dynamic contact interaction of swimming microalgae with a collision lattice	Vickie Shim
MS013	1	7/27(Wed)	18:00	18:15	307BC	15	3	151719	Computational framework for materials with different property under tension/compression and its applications in cell mechanosensing	Zongliang Du
MS013	1	7/27(Wed)	18:15	18:30	307BC	15	4	151041	Computational Modeling and Simulation of Cell Migration	Xiaowei Zeng
MS013	2	7/26(Tue)	15:30	16:00	301A	30	1	151007	Soft Matter Simulation of Cell Motility	shaofan Li
MS013	2	7/26(Tue)	16:00	16:15	301A	15	2	150754	Computational analysis of the endothelial cell morphology due to distinct flow patterns	Pablo Saez
MS013	2	7/26(Tue)	16:15	16:30	301A	15	3	150616	Computational Modeling of Amoeboid Motion: Chemotaxis and Free Movement in Different Environments	Adrian Moure Rosende
MS013	2	7/26(Tue)	16:30	16:45	301A	15	4	150081	A particle dynamics model of cell-cell rotation and morphological behavior	Fong Yew Leong
MS013	2	7/26(Tue)	16:45	17:00	301A	15	5	150506	Cofilin induced mechanical property change of actin filaments via coarse-grained approach	Hyun Joon Chang
MS014	1	7/27(Wed)	11:00	11:15	304	15	1	152391	Agent-based modelling to combine direct and indirect mechanotransduction of nucleus pulposus cells in the intervertebral disc	Miguel Angel Gonzalez Ballester
MS014	1	7/27(Wed)	11:15	11:30	304	15	2	152363	Knowledge Extraction from Medical Imaging for Patient Specific Lumbar Spine Modelling	Marie-Christine HO BA THO
MS014	1	7/27(Wed)	11:30	11:45	304	15	3	152108	Agent-based Modeling for Bone Remodeling Process	Tien-Tuan Dao
MS014	1	7/27(Wed)	11:45	12:00	304	15	4	151985	Computational Optimization for Biotransport of Tissue Scaffolds	Qing Li
MS014	1	7/27(Wed)	12:00	12:15	304	15	5	151366	Mechanosensing in the Different Pore Spaces of Bone: Arguments from a Multiscale Bone Remodeling Model, Coupled with Multiscale Poromicromechanics	Maria-ioana Pastrama
MS016	1	7/28(Thu)	15:30	16:00	307BC	30	1	150970	Effect of Mechanical Loading on Peri-Implant Bone Remodeling Measured with Time-Lapsed Imaging and Finite Element Analysis	Davide Ruffoni
MS016	1	7/28(Thu)	16:00	16:15	307BC	15	2	150204	4D measurement of bone changes in the mouse tibia: limitations and opportunities for validation of computational models of bone remodeling	Enrico Dall'Ara
MS016	1	7/28(Thu)	16:15	16:30	307BC	15	3	152014	How bone remodeling is mechanics regulated? – Lessons from the analysis of longitudinal in vivo microCT data of mouse tibia	Yongtao Lu

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS016	1	7/28(Thu)	16:30	16:45	307BC	15	4	151955	Surrogate poroelastic microscale representation of bone remodelling to inform an efficient structural mesoscale bone adaptation model	claire Villette
MS016	1	7/28(Thu)	16:45	17:00	307BC	15	5	151193	Effects of Bone Graft Thickness on Implantation-induced Bone Remodeling in Maxillary Anterior Buccal Bone	Keke Zheng
MS016	2	7/26(Tue)	17:15	17:30	301A	15	1	150877	Mathematical model of local regulation of bone remodeling by biochemical and mechanical factors	Svetlana V Komarova
MS016	2	7/26(Tue)	17:30	17:45	301A	15	2	150689	Communication of Mechanical Information among Bone Cells: Decoding the Complex Signal from Purinergic Receptors	Nicholas Mikolajewicz
MS016	2	7/26(Tue)	17:45	18:00	301A	15	3	150490	Mechanically induced intramembranous bone formation in a fracture healing callus	Graeme Pettet
MS016	2	7/26(Tue)	18:00	18:15	301A	15	4	151029	Estimate of the permeability of cancellous bone by using the poroelasticity	Young June Yoon
MS016	2	7/26(Tue)	18:15	18:30	301A	15	5	150868	Geometrical and mechanical effects in the co-evolution of bone interface and bone-forming cells	Mohd Almie Alias
MS016	2	7/26(Tue)	18:30	18:45	301A	15	6	150999	Renewing mechanical memory by bone remodelling – a new mechanostat theory	Pascal R Buenzli
MS017	1	7/26(Tue)	15:30	16:00	307BC	30	1	151960	Phase-field model of coupled tumor growth and angiogenesis	Hector Gomez
MS017	1	7/26(Tue)	16:00	16:15	307BC	15	2	152412	Measurement and mechanical modeling of human breast gland acini	Jeong-Hun Yi
MS017	1	7/26(Tue)	16:15	16:30	307BC	15	3	151345	Biochemomechanical Theory of Tumor Growth	Bo Li
MS017	1	7/26(Tue)	16:30	16:45	307BC	15	4	151219	Computational Modeling of Tumor Cell Growth and Division	Emma Lejeune
MS017	1	7/26(Tue)	16:45	17:00	307BC	15	5	150158	Modeling and Simulation of Prostate Cancer: Advances in the Development of a New Patient-Specific Tissue-Scale Diagnostic Model	Guillermo Lorenzo Gomez
MS017	2	7/27(Wed)	11:00	11:30	301A	30	1	151428	Patterning and morphology in developmental biology	Krishna Garikipati
MS017	2	7/27(Wed)	11:30	11:45	301A	15	2	151402	Surface Wrinkling Mechanics of Soft Biological Tissues	Xi-Qiao Feng
MS017	2	7/27(Wed)	11:45	12:00	301A	15	3	151128	Instabilities in Growing or Compressed Bilayered Systems with Low Stiffness Contrast	Maria Holland
MS017	2	7/27(Wed)	12:00	12:15	301A	15	4	150495	A Coupled Reaction-Diffusion-Strain Model of Bone Growth in the Cranial Vault	Chanyoung Lee
MS018	1	7/26(Tue)	11:00	11:30	GBR1	30	1	151455	Molecular Mechanisms of Muscle Contraction	Walter Herzog
MS018	1	7/26(Tue)	11:30	11:45	GBR1	15	2	151535	Modelling And Parameter Identification Of Skeletal Muscles	Antonio Bolea Albero
MS018	1	7/26(Tue)	11:45	12:00	GBR1	15	3	150459	Determining Muscle Fiber Orientations with Fluid Dynamics: A Validation with Diffusion Tensor Imaging	Justin Fernandez
MS018	1	7/26(Tue)	12:00	12:15	GBR1	15	4	150670	Experimental Quantification of Skeletal Muscle Growth in Oryctolagus Cuniculus	Kay Leichsenring
MS018	1	7/26(Tue)	12:15	12:30	GBR1	15	5	151914	Poromechanics of Human and Porcine Knee Joints	LePing Li
MS018	2	7/26(Tue)	15:30	15:45	GBR1	15	1	150928	The Importance of Valve Design for Ensuring Physiological Remodeling of Tissue-engineered Heart Valves	Sandra Loerakker
MS018	2	7/26(Tue)	15:45	16:00	GBR1	15	2	150169	A Homogenized Constrained Mixture Model for Mechano-Regulated Growth and Remodeling in Soft Tissue	Christian Johannes Cyron
MS018	2	7/26(Tue)	16:00	16:15	GBR1	15	3	151867	Numerical and Experimental Study on the Elastic-viscoplastic Behavior of Facial Soft Tissues	Mahmood Jabareen
MS018	2	7/26(Tue)	16:15	16:30	GBR1	15	4	151800	A Mechanobiological Model of Ageing Skin Wrinkles	Georges Limbert

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS018	2	7/26(Tue)	16:30	16:45	GBR1	15	5	150733	Cochlear Outer Hair Cell Power Output and Viscous Energy Loss from 3D Model using WKB Solution Method	Yanli Wang
MS018	2	7/26(Tue)	16:45	17:00	GBR1	15	6	151189	On the Experimental Measurement of Oocyte Mechanical Properties	Markus Böl
MS018	3	7/27(Wed)	15:30	15:45	301A	15	1	150402	Fluid-Structure Interaction Analysis of the Non-Contact Tonometry Tests: Understanding the Corneal Biomechanics	Mauro Malvè
MS018	3	7/27(Wed)	15:45	16:00	301A	15	2	150823	A Custom Virtual Fields Method to Extract the Hyperelastic Biomechanical Properties of Human Optic Nerve Head Tissues In Vivo	Liang Zhang
MS018	3	7/27(Wed)	16:00	16:15	301A	15	3	150328	A Hybridizable Discontinuous Galerkin Method for Porous Media Viscoelasticity	Daniele Prada
MS018	3	7/27(Wed)	16:15	16:30	301A	15	4	150806	Combination of Dynamic Magnetic Resonance Imaging (MRI) with Finite Element (FE) Analysis to Estimate Optic Nerve Head (ONH) Strains During Eye Movements	Michael J.A. Girard
MS018	3	7/27(Wed)	16:30	16:45	301A	15	5	150937	Computational Modeling of Vision-Guided and Age-Dependent Growth and Remodeling of the Tree Shrew Eye	Rafael Grytz
MS019	1	7/27(Wed)	15:30	15:45	304	15	1	151399	Nanomedicine: challenges and opportunities for computational scientists	Paolo Decuzzi
MS019	1	7/27(Wed)	15:45	16:00	304	15	2	151333	A Lattice Boltzmann Method for particle margination in shear flows	Alessandro Coclite
MS019	1	7/27(Wed)	16:00	16:15	304	15	3	151472	Theranostic Mesoporous Silica Nanoparticles coated by Hyaluronic Acid for Targeted Drug Delivery and Photodynamic therapy	Jaehong Key
MS019	1	7/27(Wed)	16:15	16:30	304	15	4	151312	Modeling Protein in Nanopore using Lattice Boltzmann Method and Elastic Network Model	Sangjae Seo
MS019	1	7/27(Wed)	16:30	16:45	304	15	5	151411	Numerical evaluation of the blood damage through prosthetic heart valves	Marco D. de Tullio
MS019	1	7/27(Wed)	16:45	17:00	304	15	6	151680	Modelling mass and heat transfer in nano-based cancer hyperthermia	Paolo Zunino
MS020	1	7/27(Wed)	17:15	17:45	307A	30	1	151895	On a Multiscale and Multiphase Model of Function, Perfusion and Growth in Human Liver	Tim Ricken
MS020	1	7/27(Wed)	17:45	18:00	307A	15	2	150872	Micro- and Macroscopic Behavior of Cross-Linked Actin Networks	Sandra Klinge
MS020	1	7/27(Wed)	18:00	18:15	307A	15	3	151196	A Two-Muscle, Three-Dimensional, Continuum-Mechanical, Forward-Dynamics Simulation of the Upper Limb	Oliver Röhrle
MS020	1	7/27(Wed)	18:15	18:30	307A	15	4	152365	Exploring the Interactions between Muscle Function and Intervertebral Disc Multiphysics in the Healthy and the Degenerated Lumbar Spine	Jérôme Noailly
MS020	1	7/27(Wed)	18:30	18:45	307A	15	5	150858	Force-velocity relation in membrane protrusion driven by actin polymerization	Yasuhiro Inoue
MS022	1	7/26(Tue)	17:15	17:45	307BC	30	1	152054	On the influence of a realistic patient-specific fiber architecture and boundary conditions in computational modeling of cardiac mechanics	Wolfgang A. Wall
MS022	1	7/26(Tue)	17:45	18:00	307BC	15	2	152175	Computational Fluid Dynamics to Evaluate Sacular Aortic Disease	Rodrigo Maximiliano Romarowski
MS022	1	7/26(Tue)	18:00	18:15	307BC	15	3	152208	Global liver hemodynamics and function modeling, in partial hepatectomy	Chloe Audebert
MS022	1	7/26(Tue)	18:15	18:30	307BC	15	4	152315	Fluid Dynamics of Mitral Valve Closure: Smooth Particle Hydrodynamics Fluid-Structure Interaction Simulations	Milan Toma
MS022	1	7/26(Tue)	18:30	18:45	307BC	15	5	151970	Implementation of an Arbitrary-Lagrangian-Eulerian (ALE) method for the simulation of Fluid-Structure-Interaction (FSI) in patient-specific cardiovascular applications	Miquel Aguirre
MS022	2	7/27(Wed)	17:15	17:30	301A	15	1	151926	Virtual pre-interventional planning to redirect hepatic venous return for the treatment of unilateral pulmonary arteriovenous malformations after total cavopulmonary connection	Kevin D Lau
MS022	2	7/27(Wed)	17:30	17:45	301A	15	2	151950	Data assimilation in time-dependent blood flow simulations	Magne Nordaas
MS022	2	7/27(Wed)	17:45	18:00	301A	15	3	151883	Computational modeling, medical imaging and genetic profiling: a holistic approach to study the aorta in congenital heart disease	Giovanni Biglino

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS022	2	7/27(Wed)	18:00	18:15	301A	15	4	151754	Bayesian inference in cardiovascular models through uncertain measurements	Sanjay Pant
MS022	2	7/27(Wed)	18:15	18:30	301A	15	5	151364	Coupled Fluid-Wall Oxygen Transport In Arterio-Venous Fistulae: Impact of Mechanical Stresses	Francesco Iori
MS024	1	7/27(Wed)	11:00	11:30	307BC	30	1	150282	Roles of collagen synthesis/removal rates in growth and remodeling simulations of vascular adaptation	Seungik Baek
MS024	1	7/27(Wed)	11:30	11:45	307BC	15	2	151947	Fully Resolved Immersed Boundary and Material Point Method For Simulating Aortic Dissection	Amneet Pal Singh Bhalla
MS024	1	7/27(Wed)	11:45	12:00	307BC	15	3	150268	A Fluid-Structure-Scalar-Scalar Interaction Model with Application to Early Atherosclerosis Progression	Michael W Gee
MS024	1	7/27(Wed)	12:00	12:15	307BC	15	4	150869	Numerical modeling of drug transport in healthy and pathological arterial wall	Miguel A. Martinez
MS024	1	7/27(Wed)	12:15	12:30	307BC	15	5	150362	Toward a better estimation of the risk of rupture for ascending thoracic aneurysms	Olfa Trabelsi
MS024	2	7/28(Thu)	11:00	11:15	301A	15	1	150491	Finite Element Modeling of a Carotid Artery with a Healed Plaque	Hiroshi Yamada
MS024	2	7/28(Thu)	11:15	11:30	301A	15	2	151502	Blood flow characteristics in the process of thrombus formation in the cerebral aneurysm after endovascular coiling	Tomohiro Otani
MS024	2	7/28(Thu)	11:30	11:45	301A	15	3	150782	Hemodynamics Changes in Thoracic Arch Aneurysm after Stent Graft Implantation	Chi Wei Ong
MS024	2	7/28(Thu)	11:45	12:00	301A	15	4	150405	Aortic Segment under Pressure Load	Ivan Breslavskiy
MS024	2	7/28(Thu)	12:00	12:15	301A	15	5	151768	Multiphysics Coupling Simulation of Thrombus Growth in Blood Flow through Venous Valve based on Continuum Scale Approach	Satoshi Ii
MS025	1	7/28(Thu)	11:00	11:15	305	15	1	151898	Generating Purkinje networks in the human heart	Francisco Sahli Costabal
MS025	1	7/28(Thu)	11:15	11:30	305	15	2	150960	Mixed-primal approximation of cardiac electromechanics	Ricardo Ruiz Baier
MS025	1	7/28(Thu)	11:30	11:45	305	15	3	150514	Inverse modeling for cardiac electrophysiology with fast eikonal approximation	Simone Pezzuto
MS029	1	7/28(Thu)	15:30	16:00	304	30	1	151224	Full-Volume Displacement Mapping of the Anterior Cruciate Ligament	Ellen M Arruda
MS029	1	7/28(Thu)	16:00	16:15	304	15	2	150562	Image-Based Modeling to Assess the Role of Impact Loading in Cartilage Damage and Chondrocyte Viability	Corey Neu
MS029	1	7/28(Thu)	16:15	16:30	304	15	3	150463	High Frequency Ultrasound, Magnetic Resonance Imaging, and Computational Fluid Flow Simulations of Murine Aneurysms	Craig J Goergen
MS029	1	7/28(Thu)	16:30	16:45	304	15	4	150558	Effects of Load Magnitude and Frequency on the Transition from Compaction to Fatigue in Articular Cartilage	David M. Pierce
MS029	1	7/28(Thu)	16:45	17:00	304	15	5	150265	Identification of Arterial Wall Growth Based on Surface Similarity	Sebastian Kehl

■ Mini-Symposium Schedule

- Computational Fluid Dynamics (MS101~MS199)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS101	1	7/25(Mon)	11:00	11:15	GBR1	15	1	152137	Multi-Moment Finite Volume Fluid Solver for Hybrid / Arbitrary Unstructured Grids	Feng Xiao
MS101	1	7/25(Mon)	11:15	11:30	GBR1	15	2	152187	Chaotic Numerical Analysis for Instability of the Taylor Vortex Flow	Takashi Watanabe
MS101	1	7/25(Mon)	11:30	11:45	GBR1	15	3	152185	Numerical Estimation of the Flow around a Rotating Disk in a Cylindrical Casing	Takashi Watanabe
MS101	1	7/25(Mon)	11:45	12:00	GBR1	15	4	151904	High Fidelity Anisotropic Adaptive Variational Multiscale Method for Turbulent Multiphase Flows	Elie Hachem
MS101	1	7/25(Mon)	12:00	12:15	GBR1	15	5	151003	Temporal evolution and scaling of mixing in turbulent thermal convection for inhomogeneous boundary conditions	wei yi kun
MS101	1	7/25(Mon)	12:15	12:30	GBR1	15	6	152243	New Numerical methods for stiff reaction flows	Liu LI
MS101	2	7/25(Mon)	15:30	15:45	307BC	15	1	151289	Comparison of Implicit and explicit Preconditioning Riemann Solvers for the Liquid Shock and Cavitation Simulation	YANG-YAO NIU
MS101	2	7/25(Mon)	15:45	16:00	307BC	15	2	151167	A Multi-Moment Essentially Non-Oscillatory Scheme Based on 3rd Order Polynomial Interpolation Functions	Kensuke Yokoi
MS101	2	7/25(Mon)	16:00	16:15	307BC	15	3	152168	Free surface flow simulations by the lattice Boltzmann method	Jan Vimmr
MS101	2	7/25(Mon)	16:15	16:30	307BC	15	4	152155	Efficient Improvement for the Third-Order WENO Scheme	Yiqing Shen
MS101	2	7/25(Mon)	16:30	16:45	307BC	15	5	151665	The Non-oscillation Reproducing Kernel Particle Method for Fluid Dynamic Problems with Shock Wave	Yu-Fong Chen
MS101	2	7/25(Mon)	16:45	17:00	307BC	15	6	150421	Development of an unstructured finite volume flow solver and its application	Zhichao Yuan
MS101	3	7/25(Mon)	17:15	17:30	307BC	15	1	151563	A Diffuse-Interface Method in a Heterogeneous Porous Medium	Ching-Yao Chen
MS101	3	7/25(Mon)	17:30	17:45	307BC	15	2	150966	A Spectral Boundary Integral Method for Cell-detailed Blood Mechanics Simulation	Jonathan Freund
MS101	3	7/25(Mon)	17:45	18:00	307BC	15	3	151469	Direct Numerical Simulation Study of Bubble Dynamics on the Influence of Non-uniform Electric Fields in Microgravity Conditions	RONG MA
MS101	3	7/25(Mon)	18:00	18:15	307BC	15	4	150331	Multiphase Flow Simulations on Sanitary Wares with Momentum Conservative Multi-Moment Finite Volume Discretization	Akio Ikebata
MS101	3	7/25(Mon)	18:15	18:30	307BC	15	5	151611	Numerical investigation of fluid flow over bluff bodies on a Nano Scale and a Micro scale in the laminar regime.	Rohit Bhattacharya
MS102	1	7/27(Wed)	15:30	16:00	307BC	30	1	152273	Acoustic Simulation for Traffic Noise using Virtual Reality Technology	Kazuo Kashiwama
MS102	1	7/27(Wed)	16:00	16:15	307BC	15	2	152074	A new Peridynamic formulation for bubbly flows studies in three dimension	Qingsong Tu
MS102	1	7/27(Wed)	16:15	16:30	307BC	15	3	151991	Automatic Mesh Generation Techniques for Adapting Triangular Meshes to Quadrilateral and Mixed-Element Meshes	Dominik Mattioli
MS102	1	7/27(Wed)	16:30	16:45	307BC	15	4	151962	A discontinuous Galerkin-based forecasting tool for the Ohio River basin	Mariah Beth Yaufman
MS102	1	7/27(Wed)	16:45	17:00	307BC	15	5	151024	Tsunami Wave Simulations Based on Discontinuous Galerkin Finite Element Method	Hiroki Hanazawa
MS102	2	7/25(Mon)	17:15	17:45	301A	30	1	151998	Discontinuous Galerkin methods on quadrilateral and hexahedral elements	Ethan J Kubatko

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS102	2	7/25(Mon)	17:45	18:00	301A	15	2	151973	DG-WAVE: advancements and applications with algal transport on the Great Lakes	Rachel Anne Sebian
MS102	2	7/25(Mon)	18:00	18:15	301A	15	3	151083	Tsunami Debris Simulation Using Shallow Water Equations Based on Finite Cover Method	Shinsuke Takase
MS102	2	7/25(Mon)	18:15	18:30	301A	15	4	151071	Numerical-Analysis-Aided Probabilistic Tsunami Risk Evaluation using Response Surface	Takuma Kotani
MS102	2	7/25(Mon)	18:30	18:45	301A	15	5	150376	Application of Computational Method for Thermal Interactions between Compressible Fluids and Solids to Natural Convection around Circular Cylinders	Daisuke Toriu
MS102	3	7/25(Mon)	11:00	11:15	305	15	1	151788	Large Scale Interaction Analysis using Stabilized MINI Element of 2D Shallow Water Flow and 3D Gas-Liquid Two-Phase Flow	Junichi Matsumoto
MS102	3	7/25(Mon)	11:15	11:30	305	15	2	152083	Solving Unsteady Advection-Diffusion Problems in One and More Dimensions with Local Discontinuous Galerkin Methods and Implicit-Explicit Runge-Kutta Time-Stepping	Dylan Wood
MS102	3	7/25(Mon)	11:30	11:45	305	15	3	151019	Fire Simulations in urban area by Stabilized finite element method	Taito Kawaguchi
MS103	1	7/25(Mon)	15:30	15:45	305	15	1	152383	Three-dimensional simulation of anisotropic ignition of an explosive crystal	Jack J. Yoh
MS103	1	7/25(Mon)	15:45	16:00	305	15	2	150729	Simulation of Subsonic Turbulent Reacting Flow in Scramjet with Ethylene Injector	Farzad Mashayek
MS103	1	7/25(Mon)	16:00	16:15	305	15	3	150322	Behavior of Concrete under the Heavy-caliber Shaped-charge Penetration	xiangzhao xu
MS103	1	7/25(Mon)	16:15	16:30	305	15	4	150227	Study of pseudo arc-length moving mesh schemes for explosion science	Xinpeng Yuan
MS103	1	7/25(Mon)	16:30	16:45	305	15	5	150115	An Efficient and Robust Three Dimensional MMALE Method	Xiang Chen
MS103	1	7/25(Mon)	16:45	17:00	305	15	6	150296	Modelling and Experimental Investigation the Gas-Solids Flows in Circulating Fluidized Beds with Different Scales	Haigang Wang
MS104	1	7/29(Fri)	8:30	8:45	301A	15	1	152359	Numerical prediction of particle collection efficiency in dust cyclone	Gyu-Mok Jeon
MS104	1	7/29(Fri)	8:45	9:00	301A	15	2	152340	CFD Simulation on 3-DOF Motion of LNG-FPSO with Sloshing Tanks in Waves	Defri Sumarwan
MS104	1	7/29(Fri)	9:00	9:15	301A	15	3	152146	6DOF Simulation of a Bio-inspired Underwater Towed Body	GwangSoo Go
MS104	1	7/29(Fri)	9:15	9:30	301A	15	4	152032	Numerical Investigation of Tsunami Suppression Effect by Under-Sea Breakwater	Tasuku Hongo
MS104	1	7/29(Fri)	9:30	9:45	301A	15	5	151667	Buckling Analysis of Ship Structure Using the IGA Method	Wen-Huai Tsou
MS104	1	7/29(Fri)	9:45	10:00	301A	15	6	151658	Suppression Effect of Tsunami by Breakwater with Seabed Plate	Hitoshi Onose
MS105	1	7/26(Tue)	11:00	11:15	305	15	1	152334	Design and Analysis of Horizontal Axis Marine Current Turbine Blades Using a Boundary Element Method	Ching-Yeh Hsin
MS105	1	7/26(Tue)	11:15	11:30	305	15	2	152380	Transient CFD and FEM analysis of the NREL 5MW wind turbine with focus on high angles of attack	Thomas Grätsch
MS105	1	7/26(Tue)	11:30	11:45	305	15	3	151353	Floating Kuroshio Turbine System Dynamics in Special Conditions	Jiahn-Hong Chen
MS105	1	7/26(Tue)	11:45	12:00	305	15	4	152379	CFD simulation on Vortex-Induced Motions (VIM) of a Spar platform with Helical Strakes	Dae-Kyung Ock
MS105	1	7/26(Tue)	12:00	12:15	305	15	5	152351	Evaluating the Propeller/Hull Interaction Effects to Conventional and Unconventional Propellers by Computational Methods	Lin Chun-Ta
MS105	1	7/26(Tue)	12:15	12:30	305	15	6	151766	A Computational Study about Behavior of a Projectile Launched from an Underwater Platform	Sung Min Jo
MS106	1	7/28(Thu)	11:00	11:15	308A	15	1	151228	A numerical method for the phase-field model of fluid vesicles in three-dimensional space	Yongho Choi

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS106	1	7/28(Thu)	11:15	11:30	308A	15	2	151119	Numerical Simulation of Microscopic Multiphase Fluid Motion on Solid Surface Using Diffuse-interface Approach	Naoki Takada
MS106	1	7/28(Thu)	11:30	11:45	308A	15	3	151923	Unified compressible-incompressible Variational MultiScale method for liquid-vapour dynamics	Mehdi Khalloufi
MS106	1	7/28(Thu)	11:45	12:00	308A	15	4	152232	Interface-resolved simulation of heavy non-spherical particles in isotropic turbulence by an accurate cut-cell method	Lennart Schneiders
MS106	1	7/28(Thu)	12:00	12:15	308A	15	5	151063	A phase-field fluid modeling and computation with interfacial profile correction term	Yibao Li
MS106	1	7/28(Thu)	12:15	12:30	308A	15	6	151282	Phase-Field Simulation of the Coffee-Ring Effect	Junseok Kim
MS107	1	7/26(Tue)	17:15	17:45	GBR1	30	1	150419	Meso-scale modeling and Multiscale CFD for multiphase flow: beyond local equilibrium assumption	Wei Wang
MS107	1	7/26(Tue)	17:45	18:00	GBR1	15	2	150521	Front-capturing method with different numerical schemes for compressible multicomponent flows	Xiang Gao Ming
MS107	1	7/26(Tue)	18:00	18:15	GBR1	15	3	151315	Influence of a Horizontal Wall on the Settling of Swarms of Fine Particles	Thinh X. Ho
MS107	1	7/26(Tue)	18:15	18:30	GBR1	15	4	150127	Evaluating separating performance of media particle from fluid in wet medium agitation mill by DEM simulation	Shosei Hisatomi
MS107	1	7/26(Tue)	18:30	18:45	GBR1	15	5	150088	The Generalized Onsager Model for a Binary Gas Mixture with Swirling Feed	Sahadev Pradhan
MS107	2	7/25(Mon)	15:30	16:00	GBR1	30	1	151815	Lagrangian simulation of free surface fluid flow and heat transfer in a severe accident	Mikio Sakai
MS107	2	7/25(Mon)	16:00	16:15	GBR1	15	2	151076	Understanding and exploiting competing segregation mechanisms in horizontally rotated granular media	Christopher Windows-Yule
MS107	2	7/25(Mon)	16:15	16:30	GBR1	15	3	151302	Numerical Study on Magnetorheological Fluid using Direct Numerical Simulation	Takahiro Watanabe
MS107	2	7/25(Mon)	16:30	16:45	GBR1	15	4	150380	Evaluating separating performance of media particle from fluid in wet medium agitation mill by DEM simulation	Takuma Tokoro
MS107	2	7/25(Mon)	16:45	17:00	GBR1	15	5	150157	Recurrence CFD: a novel approach to simulate recurrent multiphase flows	Thomas Lichtenegger
MS107	3	7/26(Tue)	11:00	11:15	307BC	15	1	151539	Modelling of sedimentation using smoothed particle hydrodynamics	Jihoe Kwon
MS107	3	7/26(Tue)	11:15	11:30	307BC	15	2	151820	On the Velocity of Sand Particles in Wind-Blown Sand Flow	Ping Wang
MS107	3	7/26(Tue)	11:30	11:45	307BC	15	3	150913	Fast, flexible particles simulations: An introduction to MercuryDPM	Anthony Richard Thornton
MS107	3	7/26(Tue)	11:45	12:00	307BC	15	4	150864	A multiscale finite element formulation for nondilute polydisperse turbidity currents	Fernando Alves Rochinha
MS107	3	7/26(Tue)	12:00	12:15	307BC	15	5	152124	A Prediction Method of the Lift-off Grain Size Distribution from Sand Bed in Wind-Blown Sand Flow	Li Liu
MS107	3	7/26(Tue)	12:15	12:30	307BC	15	6	150632	Growth of an Homogeneous Nanodroplet on a Flat Substrate	si bui quang TRAN
MS107	4	7/26(Tue)	15:30	15:45	301B	15	1	152279	Reynolds-constrained large-eddy simulation of compressible flow over a compression ramp	Zuoli Xiao
MS107	4	7/26(Tue)	15:45	16:00	301B	15	2	151049	Development of Boussinesq Type Shallow Granular Flow Models in a Global Cartesian Coordinate System	li yuan
MS107	4	7/26(Tue)	16:00	16:15	301B	15	3	152174	DEM Modelling of Multiphase Reacting Flows in a Fluidized Bed Gasifier	Xiaoke Ku
MS107	4	7/26(Tue)	16:15	16:30	301B	15	4	152212	Adaptive Hierarchical Cartesian Methods for Fully-Resolved Particle-Laden Flows	Gonzalo Brito Gadeschi
MS107	4	7/26(Tue)	16:30	16:45	301B	15	5	150232	A WAF-TVD Algorithm for Granular Avalanches on Complex Terrain	Xiao-Liang Wang

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS107	4	7/26(Tue)	16:45	17:00	301B	15	6	151909	Modeling of Non-Newtonian multiphase flow using adaptive stabilized finite element method	Stephanie Riber
MS108	1	7/29(Fri)	8:30	8:45	305	15	1	150420	MPPIC simulation of fluidization with a sub-grid EMMS drag	Fei Li
MS108	1	7/29(Fri)	8:45	9:00	305	15	2	151969	Oil Spill Simulation From Damaged Riser Using Open Source Libraries	Sang Chul Lee
MS108	1	7/29(Fri)	9:00	9:15	305	15	3	150348	Simulation of emergency operation of an oil cooled transformer	Ralf Wittmaack
MS108	1	7/29(Fri)	9:15	9:30	305	15	4	151542	Development of CFD Modeling Framework for Flow and Mass Transfer in Forward Osmosis Membrane with Porous Substrate	WOONGHEE LEE
MS109	1	7/26(Tue)	17:15	17:45	301B	30	1	150743	Fire Drake: automating the finite element method by composing abstractions.	David A. Ham
MS109	1	7/26(Tue)	17:45	18:00	301B	15	2	150836	PyFR: Open-Source Software for Multi-Platform Computational Fluid Dynamics with High-Order Flux Reconstruction Schemes	Peter Vincent
MS109	1	7/26(Tue)	18:00	18:15	301B	15	3	150974	An Open Source Platform for Multi-Physics Simulations	Andrea Lani
MS109	1	7/26(Tue)	18:15	18:30	301B	15	4	150528	On the Simulation of Viscoelastic Free-Surface Flows	Philipp Knechtges
MS109	1	7/26(Tue)	18:30	18:45	301B	15	5	151306	Finite element computations of stationary viscoelastic fluid flows using Local Projection Stabilization	Jagannath Venkatesan
MS109	2	7/27(Wed)	11:00	11:30	305	30	1	150723	Visualization and Co-Processing of High-Order Solutions in Parallel	Michel Rasquin
MS109	2	7/27(Wed)	11:30	11:45	305	15	2	151458	Nektar++: An Open-Source Spectral/hp element framework	Chris D Cantwell
MS109	2	7/27(Wed)	11:45	12:00	305	15	3	152028	Flexi: An Open-Source Petascale-Proven Discontinuous Galerkin Framework for CFD	Thomas Bolemann
MS109	2	7/27(Wed)	12:00	12:15	305	15	4	151688	FEniCS-Shells: a modern open-source extensible finite element implementation of linear and nonlinear plate and shell models	Corrado Maurini
MS110	1	7/29(Fri)	8:30	9:00	307BC	30	1	150776	Construction of Coarse-Grained Models for Polymeric Fluids via the Mori-Zwanzig Formalism	Zhen Li
MS110	1	7/29(Fri)	9:00	9:15	307BC	15	2	150272	Open boundary molecular dynamics of star-polymer melts	Matej Praprotnik
MS110	1	7/29(Fri)	9:15	9:30	307BC	15	3	150248	Numerical Comparisons among Three Particle-Based Methods: Smoothed Particle Hydrodynamics (SPH), Dissipative Particle Dynamics (DPD) and Smoothed Dissipative Particle Dynamics (SDPD)	Ting Ye
MS110	1	7/29(Fri)	9:30	9:45	307BC	15	4	150245	Dissipative Particle Dynamics Simulations of the Hydrodynamics of Droplets and Bubbles	Dingyi Pan
MS110	2	7/25(Mon)	17:15	17:45	301B	30	1	151296	Modeling of cell mechanics in microfluidics	Igor Pivkin
MS110	2	7/25(Mon)	17:45	18:00	301B	15	2	152230	Smoothed Particle Hydrodynamics Simulations for Anisotropic Diffusion Processes	THIEN TRAN-DUC
MS110	2	7/25(Mon)	18:00	18:15	301B	15	3	151684	Applications of a Smoothed Particle Hydrodynamics Particle Suspension Mixture Model to Turbulent Sediment Transport	Erwan Bertevas
MS110	2	7/25(Mon)	18:15	18:30	301B	15	4	150880	Rheology and microstructure of noncolloidal suspensions under shear studied with Smoothed Particle Hydrodynamics	Marco Ellero
MS110	2	7/25(Mon)	18:30	18:45	301B	15	5	152369	Particle-based Simulation of Free-Surface Flow with Arbitrary Shape of Boundary Using a Polygon Wall Boundary Model	Hee-Sung Shin
MS110	3	7/27(Wed)	15:30	16:00	305	30	1	151135	Shear thickening: SD-DEM model for dense suspensions	Ryohei Seto
MS110	3	7/27(Wed)	16:00	16:15	305	15	2	152213	Complex rheology of capillary suspensions and dense emulsions: a lattice Boltzmann approach	Andrea Scagliarini
MS110	3	7/27(Wed)	16:15	16:30	305	15	3	151375	Evaluation for the validity of the simulated droplet deposition using MPS method	Keigo Hanyu

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS110	3	7/27(Wed)	16:30	16:45	305	15	4	151590	Efficient transport of droplet sandwiched between saw-tooth plates	Liya Wang
MS110	3	7/27(Wed)	16:45	17:00	305	15	5	150174	Interaction of an oscillating bubble near an elastic sphere	Boo Cheong Khoo
MS111	1	7/26(Tue)	11:00	11:30	301B	30	1	150538	Stable Modeling and Simulation of 2D Elastic Flow Instability	Youngdon Kwon
MS111	1	7/26(Tue)	11:30	11:45	301B	15	2	151218	Numerical computations of suspension flows: application to a coating die manifold	Heechan Jung
MS111	1	7/26(Tue)	11:45	12:00	301B	15	3	151713	Dynamics of elliptic Janus magnetic particles in a viscous fluid under the influence of an externally applied magnetic field	Tae Gon Kang
MS111	1	7/26(Tue)	12:00	12:15	301B	15	4	152109	Nonequilibrium Molecular Dynamics Study of Polymeric Materials in Bulk and at Interface under Flow	Chunggi Baig
MS111	1	7/26(Tue)	12:15	12:30	301B	15	5	152266	Dissipative Particle Dynamics model of thixotropic liquids	Khoa Le-Cao
MS113	1	7/25(Mon)	11:00	11:30	301B	30	1	151191	Investigation of Energetic Granular Flows via Synergistic Simulations, Experiments and Theory	Anthony Rosato
MS113	1	7/25(Mon)	11:30	11:45	301B	15	2	150341	Experimental and numerical investigation of cohesive powder yield	Hao Shi
MS113	1	7/25(Mon)	11:45	12:00	301B	15	3	150829	Direct simulation of dam-break of granular materials	Rudy Valette
MS113	1	7/25(Mon)	12:00	12:15	301B	15	4	151537	Analysis of Granular Flow in Roller Compaction Process with Pushing Screw using DEM	Kazuto Yamamura
MS113	1	7/25(Mon)	12:15	12:30	301B	15	5	150400	Well-posed continuum modelling of granular flow	Thomas Barker
MS113	2	7/25(Mon)	17:15	17:30	305	15	1	150392	Depth-Averaged Free-Surface Granular Flows	Aaron Russell
MS113	2	7/25(Mon)	17:30	17:45	305	15	2	150424	Continuum Model of Wet Granular Materials	Marnix Pieter van Schrojenstein Lantman
MS113	2	7/25(Mon)	17:45	18:00	305	15	3	151927	Comparison of beds of spherical and spherocylindrical particles in vibrofluidised and rotating drum experiments.	Bert Scheper
MS113	2	7/25(Mon)	18:00	18:15	305	15	4	151038	Granular flows over inclined channels	Deepak Tunuguntla

■ Mini-Symposium Schedule

- Damage Fracture and Failure (MS201~MS299)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS201	1	7/27(Wed)	17:15	17:45	GBR1	30	1	150147	New Model and Method for Simulation of the Combined Protection of Space Vehicles from High-Velocity Debris	Alexander V. Gerasimov
MS201	1	7/27(Wed)	17:45	18:00	GBR1	15	2	151965	Low Cycle Fatigue Stochastic Models of High Loaded Engine's Structures	Yury Temis
MS201	1	7/27(Wed)	18:00	18:15	GBR1	15	3	152289	Study of A Damage-Rupture Spring Element Model Based On the Distributed Strain-Strength Criterion	Zhi-Yong Fan
MS201	1	7/27(Wed)	18:15	18:30	GBR1	15	4	151626	A prognosis of fatigue behavior for viscoelastic material	Seung-Jung Lee
MS201	1	7/27(Wed)	18:30	18:45	GBR1	15	5	150264	Two Dimensional Fracture Analysis Based on CS-FEM	wei xie
MS201	2	7/25(Mon)	11:00	11:30	308BC	30	1	151506	Failure of Metal-Intermetallic Laminate Composites under Dynamic Loading	Sergey Alekseyevich Zelepugin
MS201	2	7/25(Mon)	11:30	11:45	308BC	15	2	152267	A new modified XFEM for the numerical experiments of concrete sample in mesoscopic	Xia Xiaozhou
MS201	2	7/25(Mon)	11:45	12:00	308BC	15	3	151844	Monitoring and Analysis of Stress Field for Steel Box Girder of Dashengguan Bridge	Ying Wang
MS201	2	7/25(Mon)	12:00	12:15	308BC	15	4	151837	Spatial crack model for reinforced concrete members	Jia-ji Wang
MS201	2	7/25(Mon)	12:15	12:30	308BC	15	5	151587	A Plastic Damage Model for Anisotropic Materials Based on an Isotropic Formulation	Qiushi Fu
MS202	1	7/28(Thu)	15:30	15:45	305	15	1	151941	The numerical testing of terrain tires under strong dynamic conditions	Jerzy Malachowski
MS202	1	7/28(Thu)	15:45	16:00	305	15	2	151918	Investigation of Pipe Response to Blast and Fragment Loading	Joseph D Baum
MS202	1	7/28(Thu)	16:00	16:15	305	15	3	151212	The behaviour of a lightweight elevation system under improvised explosive device action: experiment vs. numerical verification	Piotr Witold Sielicki
MS202	1	7/28(Thu)	16:15	16:30	305	15	4	151507	Buckling optimization framework for hierarchical stiffened shells	Kuo Tian
MS203	1	7/26(Tue)	17:15	17:30	305	15	1	150255	Risk Prediction of Collapse for Buildings under Fire Using Key Element Index	Kohei Oi
MS203	1	7/26(Tue)	17:30	17:45	305	15	2	151676	Fiber Beam Elements for Distributed Plasticity Analysis Based on the Generalized Finite Element Method	Hyeongtae Kim
MS203	1	7/26(Tue)	17:45	18:00	305	15	3	150235	Refined Finite Element Analysis on Single Layer Reticulated Shells	Hui jun LI
MS204	1	7/25(Mon)	11:00	11:15	310	15	1	150428	Dislocation-based Mechanisms of Void Growth and Coalescence in Nano-porous Metallic Materials	Changwen Mi
MS204	1	7/25(Mon)	11:15	11:30	310	15	2	150623	Simulation of Concrete Dynamic Damage Process with Modified CDP Model	Li GUO
MS204	1	7/25(Mon)	11:30	11:45	310	15	3	150114	Mesososcopic Numerical Study on Effective Thermal Sconductivity of Tensile Cracked Concrete	SHEN Lei
MS204	1	7/25(Mon)	11:45	12:00	310	15	4	150241	Study on the relationships between permeability coefficient and pore characteristic parameters of low-permeability cement-based material	Zongli Li
MS205	1	7/25(Mon)	15:30	15:45	301B	15	1	151165	Benchmark Analysis for Ductile Fracture Simulation –Description of Problems and Comparison of Results–	Naoki Miura
MS205	1	7/25(Mon)	15:45	16:00	301B	15	2	150949	Benchmark Analysis for Ductile Fracture Simulation - Analysis by Tokyo University of Science -	Akiyuki Takahashi

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS205	1	7/25(Mon)	16:00	16:15	301B	15	3	150283	Development of through-wall crack propagation criteria in moderate-toughness pipes	KEISHI KUMAMOTO
MS205	1	7/25(Mon)	16:15	16:30	301B	15	4	151115	Benchmark Analysis for Ductile Fracture Simulation – Analysis by Korea University (I): Stress Modified Fracture Strain Model –	Yun-Jae Kim
MS205	1	7/25(Mon)	16:30	16:45	301B	15	5	151292	Benchmark analysis for ductile fracture simulation: – Analysis by Korea University (II): GTN and CZM Models –	YoungRyun Oh
MS205	1	7/25(Mon)	16:45	17:00	301B	15	6	151748	Benchmark Analysis for Ductile Fracture Simulation -Analysis by CRIEPI-	Tomohisa Kumagai
MS205	2	7/25(Mon)	17:15	17:30	310	15	1	150569	Assessment of Low Cycle Fatigue Life of Coiled Tubing using Yoshida-Uemori Hardening Model	Tae-Young Ryu
MS205	2	7/25(Mon)	17:30	17:45	310	15	2	150998	A Response Surface Model for Lateral Buckling Control of Subsea Pipelines by Distributed Buoyancy Sections Based on Analytical Model	Lichao Zhan
MS205	2	7/25(Mon)	17:45	18:00	310	15	3	150703	Benchmark Analysis for Ductile Fracture Simulation–Crack Propagation Analysis using Elastic-plastic XFEM	Toshio Nagashima
MS206	1	7/28(Thu)	11:00	11:30	GBR1	30	1	151762	The Thick Level Set approach to fracture and its relationships with other damage and fracture models	Nicolas MOËS
MS206	1	7/28(Thu)	11:30	11:45	GBR1	15	2	150407	A Phase Field Approach to Model Electro-chemo-mechanical Coupled Fracture in Lithium-ion Batteries	Xiaoxuan Zhang
MS206	1	7/28(Thu)	11:45	12:00	GBR1	15	3	151433	Strain Localization and Thermo-plasticity in Transversely Isotropic Materials	Shabnam J. Semnani
MS206	1	7/28(Thu)	12:00	12:15	GBR1	15	4	150775	Computational Modeling of Surfactant-driven Fracture of Particulate Rafts	Yingjie Liu
MS206	1	7/28(Thu)	12:15	12:30	GBR1	15	5	152415	On modelling crack growth in viscous solids	Elsiddig Mustafa abdalla Elmukashfi
MS206	2	7/25(Mon)	15:30	16:00	308BC	30	1	151873	Modeling crack discontinuities without element-partitioning in the extended finite element method	N. Sukumar
MS206	2	7/25(Mon)	16:00	16:15	308BC	15	2	151879	An Explicit Method for Simulation of Cracking Structures Based on Peridynamic Theory	David Miranda
MS206	2	7/25(Mon)	16:15	16:30	308BC	15	3	150160	Peridynamic Theory for Fracture Behavior Analysis of Brittle Three-Point Bending Beam Subjected to Impact load	Ning Liu
MS206	2	7/25(Mon)	16:30	16:45	308BC	15	4	151749	Simulation of 2D cracked solids with the Asymptotic Crack Patch Method	Gaetan Hello
MS206	2	7/25(Mon)	16:45	17:00	308BC	15	5	150787	Modeling and Characterization of Anisotropic Damage in Sheet Molding Compounds	Malte Schemmann
MS206	3	7/27(Wed)	15:30	16:00	301B	30	1	150892	Inverse methods for fracture based on a parabolic regularization of brittle cohesive models	Michael Tupek
MS206	3	7/27(Wed)	16:00	16:15	301B	15	2	152414	Micromechanical cohesive zone modelling of creep fracture of ferritic/austenitic dissimilar metal welds	Jianan Hu
MS206	3	7/27(Wed)	16:15	16:30	301B	15	3	152178	Stationary Crack Tip Strain Localization in FCC Single Crystals under Cyclic Load	Nipal Deka
MS206	3	7/27(Wed)	16:30	16:45	301B	15	4	150345	An adaptive body-fitted monolithic method for modeling the fracture of heterogeneous microstructures	Modesar Shakoor
MS206	3	7/27(Wed)	16:45	17:00	301B	15	5	150250	Dynamic Fracture Analysis for Linearly Elastic Solids	Shinnosuke Noso
MS207	1	7/25(Mon)	17:15	17:45	308BC	30	1	150303	Modelling multiple cracking in metal/ceramic composites with lamellar microstructure	Maria Kashtalyan
MS207	1	7/25(Mon)	17:45	18:00	308BC	15	2	150435	Discrete Crack Dynamics: A New Tool to Study the Crack Propagation Path	Mahdieh Ebrahimi
MS207	1	7/25(Mon)	18:00	18:15	308BC	15	3	151467	Determination of arbitrary crack path in layered ceramic materials using a discrete element method	John William Pro
MS207	1	7/25(Mon)	18:15	18:30	308BC	15	4	150827	Loading analysis, crack growth simulations and experiments in structures with imperfect material interfaces	Paul Judt

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS207	1	7/25(Mon)	18:30	18:45	308BC	15	5	151254	3D curved cracks propagation in nonhomogeneous materials with interfaces subjected to thermal loading	Yukun Li
MS207	2	7/25(Mon)	15:30	16:00	310	30	1	150269	Cracked Materials under Dynamic Loading: Effects of Cracks Closure	Oleksandr Menshykov
MS207	2	7/25(Mon)	16:00	16:15	310	15	2	151840	Basic developments of finite cover method for ductile fracture simulations	Hirofumi Sugiyama
MS207	2	7/25(Mon)	16:15	16:30	310	15	3	151274	Parallelization of a Peridynamic Code Using OPENMP for Dynamic Fracture Simulation	Seong Eun Oh
MS207	2	7/25(Mon)	16:30	16:45	310	15	4	150994	Modelling of Effect of Hydrostatic Stress on Hydrogen Assisted Stress Corrosion Cracking	Dhiraj Kumar Singh
MS207	2	7/25(Mon)	16:45	17:00	310	15	5	150382	Simulation and numerical computation of crack growth in quasicrystals	Zhibin Wang
MS208	1	7/26(Tue)	11:00	11:30	308BC	30	1	150073	Strain Rate Dependent Computational Model of 18650 Lithium-ion Battery	Jun Xu
MS208	1	7/26(Tue)	11:30	11:45	308BC	15	2	152314	Performance Evaluation of Steel and Hybrid Armor Plates under Ballistic Impacts	Howie Fang
MS208	1	7/26(Tue)	11:45	12:00	308BC	15	3	151792	Impact Simulation of Tubular Steel Columns Assembled with Spot Welds and Adhesives Using Surface Based Cohesive Behavior	Byunghyun Kang
MS208	1	7/26(Tue)	12:00	12:15	308BC	15	4	151161	Dynamic Crushing of Lattice Shell Structures	Jian Zhang
MS208	1	7/26(Tue)	12:15	12:30	308BC	15	5	150316	Discrete element analysis of tunnel blasting with a slot and evaluation of radiated waves	Kazuhito Wakatsuki
MS208	2	7/28(Thu)	11:00	11:15	301B	15	1	152167	Prediction of rock fragmentation distribution under blasting load based on Continuum Discontinuum Element Method	Chun Feng
MS208	2	7/28(Thu)	11:15	11:30	301B	15	2	151523	Topology optimization of multi-cell tubes under off-plane crashing using a heuristic artificial bee colony (ABC) algorithm	JIANGUANG FANG
MS208	2	7/28(Thu)	11:30	11:45	301B	15	3	150863	Numerical and experimental study on the low-velocity impact of honeycomb composite sandwich beam	Zhang Xiaoyu
MS208	2	7/28(Thu)	11:45	12:00	301B	15	4	150613	High-velocity impact simulation of carbon/epoxy woven composites	Wei Mao
MS208	2	7/28(Thu)	12:00	12:15	301B	15	5	150085	Mechanical Failure and short circuit of lithium-ion battery under static crush and impact loads: modeling and experiment validation	Chao Zhang
MS208	2	7/28(Thu)	12:15	12:30	301B	15	6	150059	Role of micro texture in adiabatic shear bands in polycrystals	Zhen Zhang
MS209	1	7/26(Tue)	11:00	11:30	310	30	1	150779	The Influences of Coulomb Tractions on Static and Dynamic Fracture Parameters for Semi-permeable Piezoelectric Cracks	Jun Lei
MS209	1	7/26(Tue)	11:30	11:45	310	15	2	151200	The influence of flexoelectricity on the domain switching in the vicinity of crack tip in ferroelectrics	Xiaofang Zhao
MS209	1	7/26(Tue)	11:45	12:00	310	15	3	151371	An Effect of Low Strain Rate on the Fatigue Properties of a Specimen with Inhomogeneous Materials	Jungho Lee
MS209	1	7/26(Tue)	12:00	12:15	310	15	4	152013	Buckling analysis of shell structures employing Galerkin meshfree formulation	Kimihiro Taniguchi
MS209	1	7/26(Tue)	12:15	12:30	310	15	5	150567	Finite element simulation on chemo-mechanical coupled large deformation of responsive hydrogel	Tao Li
MS209	2	7/26(Tue)	15:30	15:45	305	15	1	150289	Recent Developments of Local Enriched Partition-of-Unity Method for Fracture Modeling of Smart Functional Materials and Structures	TINH QUOC BUI
MS209	2	7/26(Tue)	15:45	16:00	305	15	2	150535	The theory and numerical method of J-integral in hydrogels with crack under chemo-mechanical coupling	Wei Wei
MS209	2	7/26(Tue)	16:00	16:15	305	15	3	152030	Determination of fatigue endurance limit of arbitrarily shaped notches by means of a short crack growth and the use of generative algorithms.	Nicolas O. Larrosa
MS210	1	7/26(Tue)	15:30	16:00	308BC	30	1	152386	A Nonlocal Semi-discrete Variational Peierls-Nabarro Model Applied to Dislocations in face-centered-cubic Metals	Yao Shen

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS210	1	7/26(Tue)	16:00	16:15	308BC	15	2	151845	Green's function molecular dynamics and discrete dislocation plasticity	Lucia Nicola
MS210	1	7/26(Tue)	16:15	16:30	308BC	15	3	151723	Cold-Temperature Deformation of Nano-Sized Tungsten And Niobium As Revealed By Dislocation Dynamics	Seok-Woo Lee
MS210	1	7/26(Tue)	16:30	16:45	308BC	15	4	150952	Molecular Dynamics Modeling of Mixed Dislocation Kinetics in BCC iron	Kazuki Takahashi
MS210	1	7/26(Tue)	16:45	17:00	308BC	15	5	151553	Stress-drop phenomenon generated by drag effect on dislocation core in cubic metals	Soon Kim
MS210	2	7/26(Tue)	17:15	17:30	310	15	1	151344	Stability of Eshelby Dislocations in FCC Crystalline Nanowires	Seunghwa Ryu
MS210	2	7/26(Tue)	17:30	17:45	310	15	2	150523	Dislocation governed plastic deformation and fracture toughness of nanotwinned magnesium	Ya-Fang Guo
MS210	2	7/26(Tue)	17:45	18:00	310	15	3	151697	Atomistic studies of misfit dislocations at the ferrite/cementite interface in pearlitic steel	Jaemin Kim
MS210	2	7/26(Tue)	18:00	18:15	310	15	4	150483	Numerical Investigations of Helical Dislocations in Pure Aluminum Micropillar	FengXian LIU
MS210	2	7/26(Tue)	18:15	18:30	310	15	5	150950	Influence of Elastic Anisotropy on Micro- and Macro-scopic Deformation of Polycrystalline Metals: A Dislocation Dynamics Study	Yuya Suzuki
MS210	2	7/26(Tue)	18:30	18:45	310	15	6	150055	Rate Sensitivity in Discrete Dislocation Modelling and the Application in Cold Dwell Fatigue	Zebang Zheng
MS211	1	7/28(Thu)	15:30	16:00	GBR1	30	1	151214	A Multiscale Framework to Predict Fracture Toughness Scatter of Composite Materials	Yan Li
MS211	1	7/28(Thu)	16:00	16:15	GBR1	15	2	150769	Performance of Impacted Non-Conventional Carbon Fiber-Reinforced Polymer in Shear - Test and Finite Element Analysis	Jakub Šedek
MS211	1	7/28(Thu)	16:15	16:30	GBR1	15	3	150116	Numerical prediction of limit states of composite materials by using direct methods	Min Chen
MS211	1	7/28(Thu)	16:30	16:45	GBR1	15	4	151407	Peridynamic Modeling and Analysis of Damage and Fracture in Concrete Structures	Wanjin Li
MS211	1	7/28(Thu)	16:45	17:00	GBR1	15	5	151876	3 Point Bending Simulation of Ice Using Moving Particle Semi-Implicit Method	Di Ren
MS211	2	7/29(Fri)	8:30	9:00	GBR1	30	1	151491	A Cohesive Zone Model for Viscoelastoplastic Deformation, Damage and Fracture of Grain Boundary in Two-phase Titanium Alloy	Hongwei Li
MS211	2	7/29(Fri)	9:00	9:15	GBR1	15	2	151615	Uncertainty Propagation of the Plane Multiple Cracks Stress Intensity Factors Based on Stochastic Finite Element Method	xiaofeng XUE
MS211	2	7/29(Fri)	9:15	9:30	GBR1	15	3	150736	Numerical Analysis of Failure Mechanisms of pCBN Cutting Tools	James Fletcher
MS211	2	7/29(Fri)	9:30	9:45	GBR1	15	4	150608	Progressive failure simulation of composite suture joint structures	Lijun He
MS211	2	7/29(Fri)	9:45	10:00	GBR1	15	5	151361	Studying fuel failure behaviour with a micromechanical approach	Coralie Esnoul
MS211	3	7/26(Tue)	17:15	17:45	308BC	30	1	152254	Continuum-Discontinuum Element Method and Its Applications	Shihai Li
MS211	3	7/26(Tue)	17:45	18:00	308BC	15	2	152237	Elastic-Plastic finite element analysis of fatigue crack growth of Ti-6Al-4V alloy using cohesive zone elements	Huan Li
MS211	3	7/26(Tue)	18:00	18:15	308BC	15	3	152053	Modelling and Detection of Delamination in Laminated Composite Structures Based on the Dynamic Characteristics	Yulin Luo
MS211	3	7/26(Tue)	18:15	18:30	308BC	15	4	151449	Analysis And Optimization Of Drilling Parameters Of Rock Mass	HAO YONG
MS211	3	7/26(Tue)	18:30	18:45	308BC	15	5	150899	Evaluation of intensity of singularity at 3D bonded joints between piezoelectric and isotropic materials using a conservative integral	Chonlada Luangarpa
MS211	4	7/27(Wed)	17:15	17:45	301B	30	1	150826	Surface crack and interfacial delamination in thermal barrier coating system	Xueling Fan

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS211	4	7/27(Wed)	17:45	18:00	301B	15	2	151342	Generalized damage mechanics based Crack Propagation in Rubber	Harsh Harsh
MS211	4	7/27(Wed)	18:00	18:15	301B	15	3	150912	Dynamic Energy Release Rates in Rubber	Martin Kroon
MS211	4	7/27(Wed)	18:15	18:30	301B	15	4	150629	Numerical simulation of cracking phenomena using higher order Particle Discretization Scheme (HO-PDS)	Mahendra Kumar Pal
MS211	4	7/27(Wed)	18:30	18:45	301B	15	5	150429	Deformation and Fracture of 2024-T3(51) Aluminum Alloy. Material Models Validation through Numerical Simulation of Static and Plate Perforation Tests	Vladislav V. Vershinin
MS213	1	7/28(Thu)	15:30	16:00	301B	30	1	150591	Support Optimization Based on the Failure Mode of Hydraulic Fracture Interacted with Natural Weak Plane in Shale	Songgen He
MS213	1	7/28(Thu)	16:00	16:15	301B	15	2	151081	Numerical modelling of hydraulic fracturing in anisotropic and heterogeneous media	Valliappan Valliappan
MS213	1	7/28(Thu)	16:15	16:30	301B	15	3	151065	Deformation-diffusion-flow coupled XFEM method for modeling hydraulic fracture in porous media	Tao Wang
MS213	1	7/28(Thu)	16:30	16:45	301B	15	4	150909	Combination of zero-thickness interface elements with a mesh-adaptive finite element technique for the treatment of hydraulic fracture processes	Ignasi de-Pouplana
MS213	1	7/28(Thu)	16:45	17:00	301B	15	5	151033	Numerical Simulation of Multiple Hydraulic Fractures Propagation by Coupling Solid Deformation and Fluid Flow	Qinglei Zeng
MS213	2	7/26(Tue)	15:30	15:45	310	15	1	151949	A Comparison Study on Heterogeneous Material Modelling in Oil & Gas Applications	Chenfeng Li
MS213	2	7/26(Tue)	15:45	16:00	310	15	2	152176	Stress-Seepage-Fracture Coupling Model and Its Application in Hydraulic Fracturing	Dong Zhou
MS213	2	7/26(Tue)	16:00	16:15	310	15	3	151337	Numerical Modeling of Hydraulic Fracturing in the Rock with Anisotropic and Heterogeneous Fracture Toughness	Yue Gao
MS213	2	7/26(Tue)	16:15	16:30	310	15	4	151406	Hydraulic Fracturing Simulations with Universal Meshes	Mostafa Mollaali
MS213	2	7/26(Tue)	16:30	16:45	310	15	5	151562	Hydraulic Fracturing Simulation with a Phase Field Approach	Yongxing Shen
MS213	2	7/26(Tue)	16:45	17:00	310	15	6	151120	An Extended Finite Element Method for Modeling Hydraulic Fracturing in Orthotropic Formation	Xiao-Long Wang
MS215	1	7/25(Mon)	11:00	11:30	GBR3	30	1	150100	Recent Efforts in Developing the Material Point Method for Simulating Multi-scale and/or Multi-physical Phenomena	Zhen Chen
MS215	1	7/25(Mon)	11:30	11:45	GBR3	15	2	150200	An explicit algorithm for mechanical analysis of large deformational truss and tensegrity structures	Hui Li
MS215	1	7/25(Mon)	11:45	12:00	GBR3	15	3	150276	A Two-level Nodal Strain Smoothing Meshfree Formulation for Landslide Simulations	Dongdong Wang
MS215	1	7/25(Mon)	12:00	12:15	GBR3	15	4	150300	Concurrent Coupling of Molecular Dynamics and Material Point Method with Seamless Transition by Using Smoothed Molecular Dynamics	Yan Liu
MS215	1	7/25(Mon)	12:15	12:30	GBR3	15	5	150895	A contact algorithm based on the exponential form of augmented Lagrangian method for implicit material point method	Zhen Peng Chen
MS215	2	7/27(Wed)	11:00	11:30	308BC	30	1	150137	Coupling of Shell Element with MPM and its Application in Bird Strike Simulation	Xiong Zhang
MS215	2	7/27(Wed)	11:30	11:45	308BC	15	2	150552	Multiscale Modelling with MPM and the Uintah Software for Electro-Chemistry Applications	Chris Gritton
MS215	2	7/27(Wed)	11:45	12:00	308BC	15	3	150370	Simulation of water impact problem based on incompressible material point method coupling with finite element method	Fan Zhang
MS215	2	7/27(Wed)	12:00	12:15	308BC	15	4	151672	Mechanical Response of a Large Fuel Cell Stack to vibration and fatigue lifetime: A Numerical Analysis	lifang liu
MS215	3	7/29(Fri)	8:30	9:00	301B	30	1	150725	Particle Modeling of Material Fracture Process Using a Strain-morphed Nonlocal Meshfree Method	C.T. Wu
MS215	3	7/29(Fri)	9:00	9:15	301B	15	2	152015	Evaluation of dynamic stress intensity factors employing two-dimensional ordinary state-based peridynamics	Michiya Imachi

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS215	3	7/29(Fri)	9:15	9:30	301B	15	3	151666	Densification mechanism of silica under hydrostatic pressure	Ji Xing MENG
MS215	3	7/29(Fri)	9:30	9:45	301B	15	4	151149	Simulation of Complicated Biomechanical Model: Pecking Process of Woodpecker	Yuzhe Liu
MS215	3	7/29(Fri)	9:45	10:00	301B	15	5	151339	A Coupled Scaled Boundary-Discrete-Finite Element Method for Particle Breakage Modelling in Granular Media	Andrew Hin Cheong Chan
MS218	1	7/25(Mon)	11:00	11:30	307A	30	1	150082	Parameter Studies of Practical Rock-fall Problems with Fluid Flow by Three Dimensional Discontinuous Deformation Analysis	Sasaki Takeshi
MS218	1	7/25(Mon)	11:30	11:45	307A	15	2	151370	Two-stage cohesive failure simulation with co-rotational formulation	Shun Suzuki
MS218	1	7/25(Mon)	11:45	12:00	307A	15	3	150217	Seismic Stability Assessment for the Stone-Blocks Retaining Wall by the NMM-DDA	Shigeru Miki
MS218	2	7/27(Wed)	11:00	11:30	310	30	1	150476	Predicting Ductile Fracture in Ferrous and Nonferrous Metals during Upset Forging Using an Ellipsoidal Void Model	Kazutake Komori
MS218	2	7/27(Wed)	11:30	11:45	310	15	2	151061	Simulations of Snow Avalanches Using 3-D Stabilized Finite Element Method	Yuya Yamaguchi
MS218	2	7/27(Wed)	11:45	12:00	310	15	3	150113	3-Dimensional Simplified Slope Stability Analysis By Using Hybrid-Type Penalty Method	Kiyomichi Yamaguchi
MS218	2	7/27(Wed)	12:00	12:15	310	15	4	152292	A study of forced vibration test simulation using dynamic response analysis.	Tomoharu Saruwatari
MS219	1	7/25(Mon)	15:30	15:45	307A	15	1	150617	A New Implicit Computational Framework For Void Initiation And Coalescence With Micro-Plastic Strain Up To 500%	Ruijie Liu
MS219	1	7/25(Mon)	15:45	16:00	307A	15	2	151270	Finite Strain Elastic-Plastic FEM Analysis using mesh-independent Data Points (MDPs) to Store Deformation History Data-Problems of Diffused Necking of Tensile Bar and Crack Propagation	Chiara Suzuki
MS219	1	7/25(Mon)	16:00	16:15	307A	15	3	151195	Mesh-independent Modelling of Progressive Damage and Failure in Laminated Composite Materials	Ryo Higuchi
MS219	1	7/25(Mon)	16:15	16:30	307A	15	4	151130	On a cycle-jump strategy for elasto-plastic finite element analysis under cyclic load based on temporal multiscale methodology	Kohmei Satoh
MS219	1	7/25(Mon)	16:30	16:45	307A	15	5	150551	Material Point Method for Nonlinear Analysis of Hysteretic Processes	Emmanouil Kakouris
MS219	1	7/25(Mon)	16:45	17:00	307A	15	6	151670	The Stress Distribution of the Numerical Simulation and Experimental Research on Carbon Fabric in the Process of Torsion	Gang Liu
MS219	2	7/27(Wed)	15:30	15:45	310	15	1	150900	Coupling-matrix-free Iterative S-version FEM Accelerated by Preconditioning and Line-search Techniques	Yasunori Yusa
MS219	2	7/27(Wed)	15:45	16:00	310	15	2	152017	Crack propagation simulation of a surface crack in a tubular structure by X-FEM	Kengo Maeda
MS219	2	7/27(Wed)	16:00	16:15	310	15	3	151118	Development of Generalized Finite Element with Added Heaviside Function to Drilling Degrees of Freedom for Composite Material	Yasuyuki Kanda
MS219	2	7/27(Wed)	16:15	16:30	310	15	4	151273	SCC (Stress Corrosion Cracking) Crack Propagation Analysis under the Influence of Weld Residual Stress	Hiroshi Okada
MS219	2	7/27(Wed)	16:30	16:45	310	15	5	150706	Damage propagation analysis of CFRP laminate using quasi-3D explicit XFEM	Saori Shimazaki
MS219	2	7/27(Wed)	16:45	17:00	310	15	6	151250	Characterization of Fracture Resistance of Viscoelastic Inhomogeneous Composites	Rilin Shen
MS221	1	7/25(Mon)	17:15	17:30	307A	15	1	150122	From Gradient Damage Models to Dynamic Brittle Fracture	Tianyi Li
MS221	1	7/25(Mon)	17:30	17:45	307A	15	2	152281	Applications of a phasefield model for crack propagation	Masato Kimura
MS221	1	7/25(Mon)	17:45	18:00	307A	15	3	150159	A phase-field method for computational modeling of interfacial damage interacting with crack propagation in realistic microstructures obtained by microtomography	Thanh Tung Nguyen
MS221	1	7/25(Mon)	18:00	18:15	307A	15	4	152286	Phase-Field Modelling of Fracture in Single Crystal Plasticity	Andrew McBride

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS221	1	7/25(Mon)	18:15	- 18:30	307A	15	5	150908	A variational damage model for brittle and ductile materials	Giovanni Lancioni
MS221	1	7/25(Mon)	18:30	- 18:45	307A	15	6	151078	A Phase Field Analysis of Fracture Mechanisms in Heterogeneous Materials	Charlotte Kuhn
MS221	2	7/27(Wed)	17:15	- 17:30	310	15	1	150347	A Three-Dimensional Finite-Strain Phase-Field Formulation for Thermo-Plastic Fracture	Jafar Amani Dashlekeh
MS221	2	7/27(Wed)	17:30	- 17:45	310	15	2	150804	The Impact of Degradation Functions on the Accuracy of Phase-field Models for Brittle Fracture	Juan Michael Sargado
MS221	2	7/27(Wed)	17:45	- 18:00	310	15	3	151134	An Error-estimate-free Mesh Refinement and Coarsening Method for the Phase Field Approach to Fracture	Yihuan Li
MS221	2	7/27(Wed)	18:00	- 18:15	310	15	4	152293	Phase-field Modeling of Brittle Fracture in an Euler-Bernoulli Beam	Jian Gao
MS221	2	7/27(Wed)	18:15	- 18:30	310	15	5	150069	Predicting The Critical Damage Length And Determining The Influencing Parameters For A Damage Model With Delay Effect	Mikhael Tannous

■ Mini-Symposium Schedule

- Error Estimation and Uncertainty Quantification (MS301~MS399)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS301	1	7/25(Mon)	15:30	16:00	GBR3	30	1	152375	The Double Adaptivity Algorithm for the DPG Method	Leszek Feliks Demkowicz
MS301	1	7/25(Mon)	16:00	16:15	GBR3	15	2	150610	Dual weighted residual method based error indicators for the local choice of the finite element	Dustin Kumor
MS301	1	7/25(Mon)	16:15	16:30	GBR3	15	3	150206	Goal-Oriented Adaptivity using Unconventional Error Representations	Vincent Darrigrand
MS301	1	7/25(Mon)	16:30	16:45	GBR3	15	4	151285	Adaptive discretization in Banach spaces with a nonlinear Petrov-Galerkin method	Kris VAN DER ZEE
MS301	2	7/27(Wed)	15:30	15:45	308BC	15	1	150176	Fast r-adaptivity for multiple queries of heterogeneous stochastic material	Regis Cottreau
MS301	2	7/27(Wed)	15:45	16:00	308BC	15	2	151386	An Adaptive Monte Carlo Sampling Method In Deep-Penetration Calculation	Ruihong Wang
MS301	2	7/27(Wed)	16:00	16:15	308BC	15	3	150918	A Posteriori Error Estimation for Localized Model Order Reduction	Kathrin Smetana
MS301	2	7/27(Wed)	16:15	16:30	308BC	15	4	151999	Optimization of model reduction methods with respect to quantities of interest	Serge Prudhomme
MS301	3	7/26(Tue)	11:00	11:30	307A	30	1	150765	A Posteriori Error Estimation and Adaptive Algorithms for Computational Fluid Dynamics	Johan Hoffman
MS301	3	7/26(Tue)	11:30	11:45	307A	15	2	150747	On Energy Based Error Analysis For Numerical Modeling of High Frequency Elastic Wave Propagation	Wen XU
MS301	3	7/26(Tue)	11:45	12:00	307A	15	3	150661	Error Analysis of Momentum Conservation Equation Based on Atomic-Continuum Coupled Model	Yantao Yang
MS301	3	7/26(Tue)	12:00	12:15	307A	15	4	150457	Adaptive Modelling, Simulation and Optimization of Water and Gas Supply Networks	Jens Peter Lang
MS302	1	7/28(Thu)	11:00	11:30	308BC	30	1	151322	Do imprecise geometries and flawed CAD-models contradict adaptive Finite Elements?	Ernst Rank
MS302	1	7/28(Thu)	11:30	11:45	308BC	15	2	150793	On the coupling of local multigrid and ZZ methods for unilateral contact problems in elastostatics	Frédéric Lebon
MS302	1	7/28(Thu)	11:45	12:00	308BC	15	3	151891	Localized space-time adaptative refinement based on multigrid for transient dynamic problems.	Alexandre Chemin
MS302	1	7/28(Thu)	12:00	12:15	308BC	15	4	152367	Energy-based Adaptive Mesh Refinement and Coarsening for the Phase Field Approach to Fracture	Yongxing Shen
MS302	1	7/28(Thu)	12:15	12:30	308BC	15	5	152400	Ill-posed inverse problems in elasticity: hierarchic adaptive approach	Ewa Gajda-Zagórska
MS302	2	7/26(Tue)	15:30	15:45	307A	15	1	150112	Goal-oriented Error Estimation for Static Response Sensitivity	Mengwu Guo
MS302	2	7/26(Tue)	15:45	16:00	307A	15	2	152403	3D reconstitution and numerical modeling of aluminum foams using remeshing procedure	Shijie ZHU
MS302	2	7/26(Tue)	16:00	16:15	307A	15	3	150615	Tangle-free Mesh Motion for Ablation Simulations	Justin Droba
MS302	2	7/26(Tue)	16:15	16:30	307A	15	4	152291	Study on Multi-Block Structured Grid Deformation for Multi-Element High Lift Airfoil System	YOUNGJUN LEE
MS302	2	7/26(Tue)	16:30	16:45	307A	15	5	152186	A Helmholtz-based approach for arbitrary Lagrangian-Eulerian mesh motion	Jacob Waltz
MS303	1	7/28(Thu)	11:00	11:30	310	30	1	151329	Method for the calculation of optimal bounds on the rupture probability of atherosclerotic arteries	Thomas Schmidt

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS303	1	7/28(Thu)	11:30	11:45	310	15	2	150973	Stochastic Multiscale Modeling for Cardiovascular Flow	Daniele E. Schiavazzi
MS303	1	7/28(Thu)	11:45	12:00	310	15	3	150301	Combined model for biomechanical analysis of femoroacetabular impingement (FAI) and the navigation of its medical treatment	Robert Cichon
MS303	1	7/28(Thu)	12:00	12:15	310	15	4	150209	Reliability of p-FEA of human arteries validated by experimental observations	Zohar Yosibash
MS304	1	7/28(Thu)	15:30	16:00	310	30	1	150351	Bayesian Coupling of Multi-Scale Material Models	Hermann Georg Matthies
MS304	1	7/28(Thu)	16:00	16:15	310	15	2	151685	An inverse approach for the localization and characterization of defects based on compressive experiments	Olivier Allix
MS304	1	7/28(Thu)	16:15	16:30	310	15	3	150690	Heterogeneous Multiscale Method: Computations, Testing, Uncertainty Propagation and Size Effect in Localized Failure	Adnan Ibrahimbegovic
MS304	1	7/28(Thu)	16:30	16:45	310	15	4	150205	Modeling of Inelastic Response of Masonry Subjected to Semi-Cyclic Compression	Nebojsa Mojsilovic
MS304	1	7/28(Thu)	16:45	17:00	310	15	5	151488	Return-free integrations for the elastoplastic models with distortional hardening/softening rules	Li-Wei Liu
MS305	1	7/25(Mon)	17:15	17:45	GBR3	30	1	150805	Image-based multiscale modeling of bone elasticity: how to make the most out of uncertainty?	Vittorio Sansalone
MS305	1	7/25(Mon)	17:45	18:00	GBR3	15	2	150588	Multiscale Analysis for Assessment of Potential Change in Mechanical Properties of Osteoporotic Bone by Remodeling	Daisuke Tawara
MS305	1	7/25(Mon)	18:00	18:15	GBR3	15	3	151141	Poroeelastic Analysis of Interstitial Fluid Flow in a Lamellar Osteon Subjected to Cyclic Loading	Yoshitaka Kameo
MS305	1	7/25(Mon)	18:15	18:30	GBR3	15	4	150766	A stochastic model for characterizing cortical bone composition based on μ CT imaging	DAVIDE GAGLIARDI
MS305	1	7/25(Mon)	18:30	18:45	GBR3	15	5	150246	Stochastic Multiscale Analysis of Drilling Force of Mandibular Trabecular Bone with Application to Surgery Training Simulator	Naoki Takano
MS305	2	7/27(Wed)	17:15	17:45	308BC	30	1	152214	A model order reduction method for PDEs with randomly located strong discontinuities	Gregory Legrain
MS305	2	7/27(Wed)	17:45	18:00	308BC	15	2	150327	Finite Element Mesh Superposition Method Applied to Biomechanics Study of Trabecular Bone around Acetabular Cup Implant	Kazuya Nishikawa
MS305	2	7/27(Wed)	18:00	18:15	308BC	15	3	151324	Out-of-plane Deformation Characteristic of a Microscopic Layer and Auxetic Behavior of their Laminated Structure	Hiro Tanaka
MS305	2	7/27(Wed)	18:15	18:30	308BC	15	4	150249	Stochastic Prediction of Homogenized Properties and Its Update for 3D Metal Printed Porous Structure	Paolo Realini
MS305	2	7/27(Wed)	18:30	18:45	308BC	15	5	151000	SLS Monte Carlo Simulation on Creep Properties of Ultrafine Plate-fin Structure with Uncertainty Factors	Satoshi Masuko
MS305	3	7/26(Tue)	17:15	17:30	307A	15	1	151259	Sensitivity Analysis for Multiscale Stochastic Stress Analysis of Fiber Reinforced Composite Material Considering Fiber Location Variation	Sei-ichiro Sakata
MS305	3	7/26(Tue)	17:30	17:45	307A	15	2	150767	Development of Multiscale Damage Analysis Method for Plain-Woven Laminates Based on a Homogenization Theory	Gai Kubo
MS305	3	7/26(Tue)	17:45	18:00	307A	15	3	150330	Parameterization of Geometrical Uncertainties for Textile Composite Laminate Made by Hand Layup	Kohei Hagiwara
MS305	3	7/26(Tue)	18:00	18:15	307A	15	4	150768	Analysis of Micro/Meso/Macro Thermoelastoviscoplastic Properties of Plain-Woven CFRP Laminates	Yoshihiko Sato
MS305	3	7/26(Tue)	18:15	18:30	307A	15	5	150324	Probabilistic Homogenization and Sensitivity Analysis of Balloon Porous Material	Daichi Kurita
MS305	3	7/26(Tue)	18:30	18:45	307A	15	6	150326	Modeling and Simulation of Scattered Fracture Loads in Tensile Test of Perforated Plate using Full-field Strain Measurement	Shusuke Akimoto
MS306	1	7/29(Fri)	8:30	9:00	310	30	1	152162	On Model Error and Statistical Calibration of Physical Models	Habib Najm
MS306	1	7/29(Fri)	9:00	9:15	310	15	2	150192	Ranking Hyperelastic models for simple and pure shear at large deformation using the Bayesian Framework	Thiago G Ritto

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS306	1	7/29(Fri)	9:15	9:30	310	15	3	151452	Using QUESO to Quantify Uncertainty Due To Inadequate Models Of Scalar Dispersion In Porous Media	Damon McDougall
MS306	1	7/29(Fri)	9:30	9:45	310	15	4	150239	Modeling of the Nonlinear Stochastic Dynamics of an Orchard Sprayer Tower Moving in an Irregular Terrain	Americo Barbosa da Cunha Jr
MS307	1	7/27(Wed)	11:00	11:30	307A	30	1	150106	Uncertainty quantification for hyperelastic materials: an information-theoretic stochastic model	Johann Guilleminot
MS307	1	7/27(Wed)	11:30	11:45	307A	15	2	151916	A Least-Squares, Adaptive Uncertainty Propagation Approach For A Plasma-Coupled Combustion System	Kunkun Tang
MS307	1	7/27(Wed)	11:45	12:00	307A	15	3	150388	Influence of stochastic track geometry on rail fatigue	Alfonso Michele Panunzio
MS307	1	7/27(Wed)	12:00	12:15	307A	15	4	150143	Optimal least squares method for polynomial regression	Yeonjong Shin
MS307	1	7/27(Wed)	12:15	12:30	307A	15	5	150603	Non-probabilistic uncertainty method of edge crack plate by considering a fuzzy interval variable of crack length	Ahmad Kamal Ariffin
MS307	2	7/25(Mon)	11:00	11:15	311	15	1	152171	Stochastic Finite Element Simulation of Uncertain SeismicWave Propagation through Uncertain Elastic-Plastic Soils	KalloI Sett
MS307	2	7/25(Mon)	11:15	11:30	311	15	2	151495	Uncertainty Analysis of The Ultimate Compression Load of Composite Laminates with an Embedded Delamination	Long Jiang
MS307	2	7/25(Mon)	11:30	11:45	311	15	3	150593	MULTISCALE MODELING OF THE FATIGUE BEHAVIOR OF REAL OPEN-CELL ALUMINUM FOAMS	Maximilian Geißendörfer
MS307	2	7/25(Mon)	11:45	12:00	311	15	4	150091	On Convergence of Probabilistic Non-Linear FEA Problems with Iterative Algorithms	Mark R. Gurvich
MS309	1	7/25(Mon)	15:30	15:45	311	15	1	151582	A Random Field Identification Method of a Structural System Parameter using Modal Data	Chan Kyu Choi
MS309	1	7/25(Mon)	15:45	16:00	311	15	2	150888	Uncertainty quantification of a structure with geometrical nonlinearity coupled with an internal linear acoustic fluid.	E. Capiiez-Lernout
MS309	1	7/25(Mon)	16:00	16:15	311	15	3	150193	Laminated structures with uncertainties	Thiago G Ritto
MS309	1	7/25(Mon)	16:15	16:30	311	15	4	150360	Multilevel reduced-order model for uncertainty quantification in computational structural dynamics	Olivier Ezvan
MS309	1	7/25(Mon)	16:30	16:45	311	15	5	150230	Benchmark solutions of random vibration responses for rectangular thin plate and dynamic reliability assessment	Guohai Chen
MS309	1	7/25(Mon)	16:45	17:00	311	15	6	150302	Model calibration of dynamical structures in presence of uncertainties in the placement of sensors and actuators	Anas Batou

■ Mini-Symposium Schedule

- Fluid-Structure Interaction and Contact (MS401~MS499)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS401	1	7/25(Mon)	17:15	17:30	311	15	1	151298	An Immersed Smoothed Finite Element Method for Fluid-Structure Interactions of Dielectric Elastomer Actuator in Fluid Flows	Zhi-Qian Zhang
MS401	1	7/25(Mon)	17:30	17:45	311	15	2	151935	Unified S-FEM for modelling fluid-solid interactions in complex real industrial equipment	Quentin Schmid
MS401	1	7/25(Mon)	17:45	18:00	311	15	3	151216	Suppressing spurious pressure fluctuation at immersed boundary interpolation method	Seyed Hossein Madani
MS402	1	7/26(Tue)	11:00	11:15	311	15	1	150168	THERMOMECHANICAL PROPERTIES AND MICRO-CONTACT PERFORMANCE OF OXIDIZED DLC FILM USING MOLECULAR DYNAMICS SIMULATIONS	Chang-Dong Yeo
MS402	1	7/26(Tue)	11:15	11:30	311	15	2	150377	A localized interface scheme for a treatment of dissimilar meshes in structural dynamics	Yeo-UI Song
MS402	1	7/26(Tue)	11:30	11:45	311	15	3	150353	A Unified Framework for Beam-to-Beam Contact Interaction	Alexander Popp
MS402	1	7/26(Tue)	11:45	12:00	311	15	4	150866	Finite Element simulation of the contact interaction between a dental prosthesis and a bone represented by a medical image using Cartesian grids	Jose Manuel Navarro
MS402	1	7/26(Tue)	12:00	12:15	311	15	5	151379	Fixed-mesh Eulerian Contact Formulation using X-FEM	Koji Nishiguchi
MS402	1	7/26(Tue)	12:15	12:30	311	15	6	152117	Element-Independent Implementation of Nonmatching Interface Constraint Conditions	Gil-Eon Jeong
MS403	1	7/26(Tue)	15:30	16:00	GBR3	30	1	152114	The immersed boundary method with porous boundary	Yongsam Kim
MS403	1	7/26(Tue)	16:00	16:15	GBR3	15	2	152119	An Immersed Boundary Method For Simulating Vesicle Dynamics In Three Dimensions	Yunchang Seol
MS403	1	7/26(Tue)	16:15	16:30	GBR3	15	3	151834	A Fully Stabilized Combined Field Formulation for Coupled Fluid-Structure Interactions	Pardha S Gurugubelli
MS403	1	7/26(Tue)	16:30	16:45	GBR3	15	4	151826	A partitioned approach for the coupling of SPH and FE methods for transient non-linear FSI problems with different time-steps	Jorge Nunez-Ramirez
MS403	1	7/26(Tue)	16:45	17:00	GBR3	15	5	150943	Numerical Simulations of Spheroid Sedimentation in Quiescent Fluid	Geunwoo Oh
MS403	2	7/27(Wed)	15:30	15:45	307A	15	1	152387	An Immersed Boundary Projection Method for Flow over Moving Boundaries	Wei-Xi Huang
MS403	2	7/27(Wed)	15:45	16:00	307A	15	2	151811	Aeroelastic Study for HART-II Rotor Using Unstructured Mixed Meshes	Youngjin Kim
MS403	2	7/27(Wed)	16:00	16:15	307A	15	3	150881	preCICE – A distributed, multi-physics coupling library for HPC applications	Florian Lindner
MS403	2	7/27(Wed)	16:15	16:30	307A	15	4	150307	Fluid-Structure Interaction Analysis of Axisymmetric Solid Rocket Motor	Gyoo Dong JUNG
MS403	2	7/27(Wed)	16:30	16:45	307A	15	5	150672	The Effectiveness of the Perfectly Matched Layer in Fluid-Structure Interaction Problems	Ni Zhen
MS403	2	7/27(Wed)	16:45	17:00	307A	15	6	150808	Numerical Study of Micro-Channel Flows Using a DSMC Method	Young Jae Choi
MS404	1	7/26(Tue)	15:30	15:45	311	15	1	151445	Fluid – Structure Interaction Design of Micro Flexible Wing Mimicking Insect Flapping Flight	Daisuke Ishihara
MS404	1	7/26(Tue)	15:45	16:00	311	15	2	152136	Methodology Development for Wind Driven Cantilever Vibration Using ANSYS Fluent-Structural Interaction	Mahesh J Vaze
MS404	1	7/26(Tue)	16:00	16:15	311	15	3	151271	A Moving-Least-Square Immersed Boundary Method for Fluid-Structure Interaction	Duc-Vinh Le

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS404	1	7/26(Tue)	16:15	16:30	311	15	4	150643	Fluctuating Hydrodynamic Approaches for Fluid-Structure Interactions Subject to Thermal Fluctuations : Applications in Soft Materials and Fluidics	Paul J Atzberger
MS404	1	7/26(Tue)	16:30	16:45	311	15	5	150485	A second-order changing-connectivity ALE scheme and its application to FSI with large convection of fluids and near contact of structures	Jie Liu
MS405	1	7/26(Tue)	11:00	11:15	GBR3	15	1	151520	Positivity Preserving Finite Element Technique for Delayed DES Modeling of Fluid-Structure Interaction	Vaibhav Joshi
MS405	1	7/26(Tue)	11:15	11:30	GBR3	15	2	152236	The simulation of fluid-membrane interaction using Lagrange-Euler method	Wenjie Duan
MS405	1	7/26(Tue)	11:30	11:45	GBR3	15	3	152235	Integration of FSI Analysis and Active Control	Shigeki Kaneko
MS405	1	7/26(Tue)	11:45	12:00	GBR3	15	4	151886	Sensitivity Analysis of Fluid-Structure Interaction Using a Unified Fractional Step Solver	Michael H. Scott
MS405	1	7/26(Tue)	12:00	12:15	GBR3	15	5	151416	Parallelization of Enriched Free Mesh Method for Large Scale Fluid-Structure Interaction Analysis	Shinsuke NAGAOKA
MS405	2	7/28(Thu)	15:30	15:45	308BC	15	1	150840	Simulation of a Proposed Fluid-Structure Interaction Validation Case	Jonathan S Pitt
MS405	2	7/28(Thu)	15:45	16:00	308BC	15	2	150818	A Numerical Investigation of the Fluid-Structure Interaction between Flexible Cylinders Exposed to Axial Flow	Jeroen De Ridder
MS405	2	7/28(Thu)	16:00	16:15	308BC	15	3	150458	Partitioned solution of coupled problems using quasi-Newton methods	Joris Degroote
MS405	2	7/28(Thu)	16:15	16:30	308BC	15	4	150366	Kinematic Optimization of Flapping Motion in Hovering Flight Using Partitioned FSI Method	Giwon Hong
MS405	2	7/28(Thu)	16:30	16:45	308BC	15	5	150312	Consistent Interface Fluid-Structure Interaction Model based on Mesh-free Particle Method and Finite Element Method	Naoto Mitsume
MS406	1	7/29(Fri)	8:30	9:00	308BC	30	1	151994	Simulations of the interactions of sedimenting spheres with immersed boundary method	Chao-An Lin
MS406	1	7/29(Fri)	9:00	9:15	308BC	15	2	151908	Application of Finite Element Package in the Platform Development for Fluid-Structure Interaction Analysis	Chien-Kai Wang
MS406	1	7/29(Fri)	9:15	9:30	308BC	15	3	151677	Imaged-based Fluid-solid Interaction Analysis	Shin-Ruei Lin
MS406	1	7/29(Fri)	9:30	9:45	308BC	15	4	151773	Fluid-solid Interaction Simulation of Liquefaction of Granular Solid Particles in Viscous Fluid	Yu-Hsuan Lee
MS406	2	7/28(Thu)	11:00	11:30	307A	30	1	150947	Numerical simulation of the hydroelasticity of a vertical cylindrical structure due to wave loads	Ming-Jyh Chern
MS406	2	7/28(Thu)	11:30	11:45	307A	15	2	151309	Molecular Dynamics Study of Pressure-Driven Water Transport through Graphene Bilayers	Kun Zhou
MS406	2	7/28(Thu)	11:45	12:00	307A	15	3	151810	Modeling of Offshore Foundation with Dynamic Wave Loading Using Reproducing Kernel Particle Method	Pai-Chen Guan
MS406	2	7/28(Thu)	12:00	12:15	307A	15	4	152302	Discrete Element Method to Investigate the Efficiency of Landslide Barriers	Chi-Hao Lin

■ Mini-Symposium Schedule

- Material Science (MS501~MS599)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS501	1	7/25(Mon)	11:00	11:30	317BC	30	1	150599	Computational Analysis of Biological Tissues for Biomedical Applications	Vadim V. Silberschmidt
MS501	1	7/25(Mon)	11:30	11:45	317BC	15	2	150609	Computational analysis of fracture and healing processes in cortical bone tissue	Simin Li
MS501	1	7/25(Mon)	11:45	12:00	317BC	15	3	150418	Mechanical behavior of polycarbonate under high-rate loadings: numerical modeling and experimentation	Yingjie Xu
MS501	1	7/25(Mon)	12:00	12:15	317BC	15	4	151279	Two failure modes of C/SiC composites under high-speed and hypervelocity impact loads	Yang Yang
MS501	1	7/25(Mon)	12:15	12:30	317BC	15	5	150167	New Invariants For New Hyperelastic Anisotropic Models – The Special Case Of A One-Fiber Material	renye cai
MS501	2	7/27(Wed)	11:00	11:15	301B	15	1	151357	Multi-scale Modelling of Plasticity and Damage of Martensite in Advanced Steels	Varvara Kouznetsova
MS501	2	7/27(Wed)	11:15	11:30	301B	15	2	150580	A crystal plasticity model of HCP metals: Incorporating strain-rate effect and temperature dependence	Qiang Liu
MS501	2	7/27(Wed)	11:30	11:45	301B	15	3	152084	Perturbation Theory and Elastic Interaction of Grains in Polycrystals	Viacheslav Shavshukov
MS501	2	7/27(Wed)	11:45	12:00	301B	15	4	151760	On mixed isogeometric analysis of poroelasticity	Eivind Fonn
MS501	2	7/27(Wed)	12:00	12:15	301B	15	5	150577	Indentation studies in Silicon Carbide	Anish Roy
MS501	2	7/27(Wed)	12:15	12:30	301B	15	6	152144	Mechanical behavior of methane hydrate bearing soil under different b values using DEM	Jie HE
MS501	3	7/26(Tue)	17:15	17:30	311	15	1	152158	Void Growth in Aluminium Alloys – A CPFEM based study	Muhammad Amir
MS501	3	7/26(Tue)	17:30	17:45	311	15	2	151261	Direct Numerical Simulation of Failure Mechanisms in Polycrystalline Structures	Bo Li
MS501	3	7/26(Tue)	17:45	18:00	311	15	3	152006	Multi-scale modeling and simulation of powder compaction	Marcial Gonzalez
MS501	3	7/26(Tue)	18:00	18:15	311	15	4	150700	Nonlinear Dynamic Characteristic of Shape Memory Alloy Beam Structure	Wang Longfei
MS501	3	7/26(Tue)	18:15	18:30	311	15	5	151090	Flexoelectricity in Soft and Biological Materials	Qian Deng
MS502	1	7/27(Wed)	11:00	11:30	311	30	1	151798	Simultaneous Analysis of Strongly-Coupled Composite Energy Harvester-Circuit Systems Driven by Fluid-Structure Interaction	Andreas Zilian
MS502	1	7/27(Wed)	11:30	11:45	311	15	2	151552	Modeling and Design of Metamaterial-based Energy Harvester Considering Wave Cancellation Effect	Yong Chang Shin
MS502	1	7/27(Wed)	11:45	12:00	311	15	3	151198	Transfer Matrix Approach to the Amplification of Light in One-dimensional Vibrating Metal Photonic Crystal	Tsuyoshi Ueta
MS502	1	7/27(Wed)	12:00	12:15	311	15	4	151139	A development of a periodic boundary element method for plasmonic devices	Toru Takahashi
MS502	1	7/27(Wed)	12:15	12:30	311	15	5	150997	Multi-Objective Topology Optimization for Carpet Cloaks	Garuda Fujii
MS504	1	7/25(Mon)	15:30	16:00	317BC	30	1	150501	Continuum-based cohesive zone models for ductile metals	Hyun-Gyu Kim
MS504	1	7/25(Mon)	16:00	16:15	317BC	15	2	151131	Fracture Simulation of Reinforced Concrete Using an Isotropic Damage Model Based on Fracture Mechanics	Yuto Soma

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS504	1	7/25(Mon)	16:15	16:30	317BC	15	3	151648	Crack Path Prediction of 3D Mixed-mode Fracture by using Cohesive Zone Modeling	Habeun Choi
MS504	1	7/25(Mon)	16:30	16:45	317BC	15	4	151014	Ductile Crack Propagation Analysis by a New Cohesive Zone Model embedded in Damage Constitutive Laws	Yuichi Shintaku
MS504	1	7/25(Mon)	16:45	17:00	317BC	15	5	152373	General transmission conditions and cohesive modelling of thin elasto-plastic pressure-dependent adhesive joints	Andrea Piccolroaz
MS504	2	7/27(Wed)	15:30	15:45	311	15	1	150971	Micromechanical modelling of polymer bonded explosives	Joanna Yuen Sai Li-Mayer
MS504	2	7/27(Wed)	15:45	16:00	311	15	2	151655	Multi-scale Dynamic Fracture Analysis for a Material with Microstructure by Using Mesh Adaptivity	Hyunil Baek
MS504	2	7/27(Wed)	16:00	16:15	311	15	3	151610	Evaluating Energy Release Rate near Crack-Tip of Poroviscoelastic Media with Cohesive Zone model	Yu-Yun Lin
MS504	2	7/27(Wed)	16:15	16:30	311	15	4	151653	Finite element modeling of scarf repaired CFRP laminates under impact loading	Feng Wei
MS504	2	7/27(Wed)	16:30	16:45	311	15	5	150685	On the development of a coupled two-scale model for robust interlaminar damage analysis of composite structures	Tillmann Herwig
MS505	1	7/26(Tue)	17:15	17:45	GBR3	30	1	151546	Concurrent Multiscale Simulations of Polymers and Amorphous Materials	Vincent Tan
MS505	1	7/26(Tue)	17:45	18:00	GBR3	15	2	150842	Constitutive and finite element modeling for double network hydrogels	Yonggang Zheng
MS505	1	7/26(Tue)	18:00	18:15	GBR3	15	3	150547	A Predictive Parameter for the Shape Memory Behavior of Thermoplastic Polymers	Rui Xiao
MS505	1	7/26(Tue)	18:15	18:30	GBR3	15	4	150680	The Constitutive Models of Shape Memory Polymers Based on Viscoelasticity and Phase transition	Yunxin Li
MS505	1	7/26(Tue)	18:30	18:45	GBR3	15	5	150763	Nonlinear Characteristic of Dielectric Elastomer Under Electromechanical Coupling Loading	Tongqing Lu
MS505	2	7/26(Tue)	11:00	11:30	317BC	30	1	150110	Computational Modeling of Electromechanical Instabilities in Dielectric Elastomers	Harold Park
MS505	2	7/26(Tue)	11:30	11:45	317BC	15	2	150472	A Finite Element Method for Light Responsive Shape-Memory Polymers	Shawn Chester
MS505	2	7/26(Tue)	11:45	12:00	317BC	15	3	150693	Modeling of Shape Memory Polymer Composites that Self-Transform in Response to Uniform Heating	Zhouzhou Pan
MS505	2	7/26(Tue)	12:00	12:15	317BC	15	4	150817	Analytical solution of composite gel structures with novel mechanical properties	Jianying Hu
MS505	2	7/26(Tue)	12:15	12:30	317BC	15	5	150260	Multi-scale Modeling of Film/Substrate Buckling	Fan Xu
MS505	3	7/28(Thu)	15:30	16:00	307A	30	1	150963	On the Residual Stress and Growth and Remodelling in the Heart and Arteries	Xiaoyu Luo
MS505	3	7/28(Thu)	16:00	16:15	307A	15	2	151249	Nonlinear dynamics of dielectric elastomers as an in-plane resonators	BO LI
MS505	3	7/28(Thu)	16:15	16:30	307A	15	3	150702	Theoretical and Computational Studies of Cell Competition in an Epithelial Monolayer	Yang Liu
MS505	3	7/28(Thu)	16:30	16:45	307A	15	4	150686	Atomic Understanding of the Swelling Property and Instability of Polyacrylamide Hydrogel	Shuai Xu
MS505	3	7/28(Thu)	16:45	17:00	307A	15	5	150687	The numerical and experimental study on aerospace structures of shape memory polymers(SMPs)	Ruoxuan Liu
MS506	1	7/29(Fri)	8:30	9:00	317BC	30	1	150531	Modeling of 2D chiral lattices and the application on design of elastic metamaterials	Xiaoning Liu
MS506	1	7/29(Fri)	9:00	9:15	317BC	15	2	150910	Extremely Low Frequency Bandpass Filtering by a Metamaterial Consisting of Discrete Elements	Seong Jae Choi
MS506	1	7/29(Fri)	9:15	9:30	317BC	15	3	150368	Acceleration feedback control of elastic waves in phononic crystals consisting of monoatomic lattice chain bonded to elastic matrix	Yi-Ze Wang

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS506	1	7/29(Fri)	9:30	9:45	317BC	15	4	150710	Analysis and Design of a Metaporous Layer of High Sound Absorption	Jieun Yang
MS506	1	7/29(Fri)	9:45	10:00	317BC	15	5	150708	Characterization method for anisotropic acoustic metamaterial slabs	Jun Hyeong Park
MS506	2	7/27(Wed)	17:15	17:30	311	15	1	150372	Application of Genetic Algorithm in Topology Optimization of Phononic Crystals and Devices	Yue-Sheng Wang
MS506	2	7/27(Wed)	17:30	17:45	311	15	2	150867	Hierarchical phononic crystals for multiscale wavelength attenuation	Marco Miniaci
MS506	2	7/27(Wed)	17:45	18:00	311	15	3	151484	Defect States Calculations of Two-dimensional Periodic Structures Using A Matrix-Exponential Decomposition Based Time-domain Method	Xiao-Xing Su
MS508	1	7/27(Wed)	11:00	11:30	GBR3	30	1	150851	PHYSICALLY BASED CONSTITUTIVE MODEL FOR ELECTRICAL ASSISTED FORMING	Myoung-Gyu Lee
MS508	1	7/27(Wed)	11:30	11:45	GBR3	15	2	151515	Differential Hardening of Aluminum Alloy Sheets: Formulation and Application to Forming Simulations	Toshihiko Kuwabara
MS508	1	7/27(Wed)	11:45	12:00	GBR3	15	3	150280	A computational model considering phase transformation in friction stir welding of steel	Heung Nam Han
MS508	1	7/27(Wed)	12:00	12:15	GBR3	15	4	150990	A Non-normality Flow Rule Taking into Account Vertex Effects on Yield Locus	Kengo Yoshida
MS508	1	7/27(Wed)	12:15	12:30	GBR3	15	5	152252	Analysis of fracture behavior for automotive parts	Daeyong Kim
MS508	2	7/27(Wed)	15:30	16:00	GBR3	30	1	151857	A Novel Plastic Constitutive Model for Anisotropic Metals based on Non-Associated Flow Rule	Tetsuo Oya
MS508	2	7/27(Wed)	16:00	16:15	GBR3	15	2	151499	Dynamic Failure Response of Resistance Spot Welded Advanced High Strength Steel Sheets	Wooram Noh
MS508	2	7/27(Wed)	16:15	16:30	GBR3	15	3	151577	ALE-BASED METAL FORMING SIMULATION FOR ALUMINUM MICRO-EXTRUSION PROCESSES	khalid saleh Alsunayyin
MS508	2	7/27(Wed)	16:30	16:45	GBR3	15	4	151304	Study of Cornea Mechanical Behavior for Keratoplasty using Finite Element Methods	Jong Won Baek
MS508	2	7/27(Wed)	16:45	17:00	GBR3	15	5	151783	Numerical Material Test using Finite Element Polycrystal Model based on Successive Integration	Naoyuki Araki
MS508	3	7/29(Fri)	8:30	8:45	307A	15	1	152251	Experimental and numerical investigations on the evolution of the plastic anisotropy for sheet metals under loading path changes	Jinwoo Lee
MS508	3	7/29(Fri)	8:45	9:00	307A	15	2	151740	Effect of Boundary Conditions on Bicrystalline Micropillar Compression Using High-order Gradient Crystal Plasticity	Yuichi Tadano
MS508	3	7/29(Fri)	9:00	9:15	307A	15	3	152276	Determination of Flow Stress of Laser Welded Dual-Phase Steel Sheets	YongChan Hur
MS508	3	7/29(Fri)	9:15	9:30	307A	15	4	151171	Numerical Biaxial Tensile Test of Aluminum Alloy Sheets based on Crystal Plasticity Finite Element Method	Shohei Ochiai
MS508	3	7/29(Fri)	9:30	9:45	307A	15	5	150714	Sintering Modeling of Copper Powders: Bridge to Mesoscale Simulation from the Atomistic Simulation	Yujin Seong
MS508	3	7/29(Fri)	9:45	10:00	307A	15	6	151578	Development of Innovative Complex Forming Process and Fracture Model at Elevated Temperatures for Light-Weight Metal Sheets	Hong Jong-Hwa
MS511	1	7/28(Thu)	11:00	11:15	311	15	1	152082	Two-scale FE-FFT phase-field-based computational modeling of bulk microstructural evolution and nanolaminates	Stefanie Reese
MS511	1	7/28(Thu)	11:15	11:30	311	15	2	150576	Localization of folding and faulting in extreme Cosserat materials	Davide Bigoni
MS511	1	7/28(Thu)	11:30	11:45	311	15	3	151675	Inter-granular Microstructure Formation and Evolution Through Crystal Plasticity	Tuncay Yalcinkaya
MS511	1	7/28(Thu)	11:45	12:00	311	15	4	150120	Quantitative Grain-Scale Validations of a BCC Crystal Plasticity Model using Single and Polycrystalline Tantalum	Hojun Lim
MS511	1	7/28(Thu)	12:00	12:15	311	15	5	151944	Climb-enabled discrete dislocation plasticity for Ni-based superalloy microstructures	Can Ayas

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS511	1	7/28(Thu)	12:15	12:30	311	15	6	150219	Micromechanical modelling of dual-phase steel based on artificial microstructures	Yuliang Hou
MS512	1	7/28(Thu)	15:30	15:45	311	15	1	152413	Numerical Modelling of Concrete Subjected to Transient Thermal Conditions	Partha Mandal
MS512	1	7/28(Thu)	15:45	16:00	311	15	2	152199	Coupled Thermo–Hydro–Mechanical Processes for the Dutch Radioactive Waste Repository in the Boom Clay Formation	Poly Buragohain
MS512	1	7/28(Thu)	16:00	16:15	311	15	3	150403	Coupled mass diffusion-deformation modelling of graphene-oxide membrane and polymer substrate: Interfacial crack study	Andrey P Jivkov
MS512	1	7/28(Thu)	16:15	16:30	311	15	4	150175	A Convertible Self-consistent Method for Evaluation of Diffusivity of Cement Paste	Yuguo Yu
MS512	1	7/28(Thu)	16:30	16:45	311	15	5	151276	Measurement of the DBTT in 3.4% silicon steel by tensile tests at high strain rate using a servo-hydraulic machine	Junbeom Kwon
MS512	1	7/28(Thu)	16:45	17:00	311	15	6	150556	Coupled Degradation Mechanism of Concrete Exposed to Cold Climates	Daman Panesar
MS515	1	7/29(Fri)	8:30	9:00	311	30	1	152398	Approach to Design Electromagnetic Energy Harvester integrated with Back-iron Materials	Sang Won Yoon
MS515	1	7/29(Fri)	9:00	9:15	311	15	2	152036	Dynamic Model of Nonlinear Plates with Flexoelectricity	Lihua Chen
MS515	1	7/29(Fri)	9:15	9:30	311	15	3	151937	Optimum design of piezoelectric energy harvesting device considering uncertainty of physical experiments	Jihoon Kim
MS515	1	7/29(Fri)	9:30	9:45	311	15	4	151702	'S' Shaped Multimodal Piezoelectric Energy Harvester and its Uncertainty Issues	Sin-woo Jeong
MS516	1	7/25(Mon)	11:00	11:15	308A	15	1	151363	Application of an anisotropic bounding surface model in finite element analyses	Ching Hung
MS516	1	7/25(Mon)	11:15	11:30	308A	15	2	152131	Atomic-scale Ferroelectricity/Magnetism Intrinsic to Dislocation Core in Perovskite Oxides	Takahiro Shimada
MS516	1	7/25(Mon)	11:30	11:45	308A	15	3	151314	Lubrication Mechanisms of Graphene for DLC Films Scratched by a Diamond Tip	Kun Zhou
MS516	1	7/25(Mon)	11:45	12:00	308A	15	4	151437	A Study on Elastic Instability of Nanoscale Materials	Duc Tam Ho
MS516	1	7/25(Mon)	12:00	12:15	308A	15	5	152238	Numerical Simulations for Metallic Glass Octet Architected Nano-Lattice Structures under 3-Point Bending	Ping Liu
MS516	1	7/25(Mon)	12:15	12:30	308A	15	6	151492	Single Crystal Silicon Carbide under Mechanical Shear Deformation: Temperature, Size, and Strain rate Effects	Liang Wang
MS516	2	7/25(Mon)	15:30	15:45	314	15	1	150656	Phase-field modeling of morphological evolution of oxides in the oxidized dispersion strengthened alloy	Kunok Chang
MS516	2	7/25(Mon)	15:45	16:00	314	15	2	151346	Solving the Controversy on Wetting Transparency of Graphene	Donggyu Kim
MS516	2	7/25(Mon)	16:00	16:15	314	15	3	150412	Transmission Analysis of Coupled Membrane-ring Structures	Chen Hao-Wei
MS516	2	7/25(Mon)	16:15	16:30	314	15	4	151396	Size effects in irregular open cellular foams	Stefan Liebenstein
MS516	2	7/25(Mon)	16:30	16:45	314	15	5	150606	Giant Strain-Mediated Magnetoelectric Coupling in Multiferroic Nanocomposites	Lich Van Le
MS516	2	7/25(Mon)	16:45	17:00	314	15	6	150291	The Modeling of Single-Walled Carbon Nanotubes in Ionic Surfactant Aqueous Solutions based on DLVO Theory and Coarse-grained Molecular Dynamic Simulation	Huang Hsiang Yun
MS516	3	7/27(Wed)	17:15	17:30	305	15	1	151511	The effect of primary knocked-on atom direction and the surface effect on the displacement cascades in BCC W: molecular dynamics study	HyungGyu Lee
MS516	3	7/27(Wed)	17:30	17:45	305	15	2	150134	Elastic properties of gold supracrystals: effects of nanocrystal size, nanocrystallinity and ligand length	Xuepeng Liu
MS516	3	7/27(Wed)	17:45	18:00	305	15	3	151448	Microstructure Evolution in Compacted Swelling Clays under Demanding Environments – Modelling the Coupled Degradation Mechanisms	Majid Sedighi

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS516	3	7/27(Wed)	18:00	18:15	305	15	4	150758	A Continuum Model for Distributions of Parallel Dislocations Incorporating Short-range Interactions	Niu Xiaohua
MS516	3	7/27(Wed)	18:15	18:30	305	15	5	151170	Investigation of the hardening behavior of sheet metals at intermediate strain rates considering the pre-strain	Minki Kim
MS516	3	7/27(Wed)	18:30	18:45	305	15	6	151241	Tensile Properties of Auto-body Plastic with Various Strain Rates for FEM by Using The DIC Method and The Force Equilibrium Grid Method	Jesung Yoo
MS518	1	7/26(Tue)	15:30	16:00	317BC	30	1	150052	Simulation of Additive Manufacturing for AeroEngine Materials	Lars-Erik Lindgren
MS518	1	7/26(Tue)	16:00	16:15	317BC	15	2	151220	Modeling Deformation and Microstructure Evolution of Additively Manufactured Materials	Anthony D Rollett
MS518	1	7/26(Tue)	16:15	16:30	317BC	15	3	150053	Modelling Additive Manufacturing Processes	Mustafa Megahed
MS518	1	7/26(Tue)	16:30	16:45	317BC	15	4	151946	Using Simulation to Locally Control Grain Structure in Additively Manufactured Parts	John Alexander Turner
MS518	1	7/26(Tue)	16:45	17:00	317BC	15	5	150101	Coarse-Grained Molecular Simulation for the Filler Effect on Dynamic Viscoelastic Properties of Shape Memory Polymer Composites	Masaaki Nishikawa
MS518	2	7/25(Mon)	15:30	15:45	308A	15	1	150621	Prediction of residual stresses and distortions induced by the Additive Manufacturing process	michele chiumenti
MS518	2	7/25(Mon)	15:45	16:00	308A	15	2	150493	Numerical Simulation of Temperature Variations in Laser Additive Manufacturing	Zhao Zhang
MS518	2	7/25(Mon)	16:00	16:15	308A	15	3	151726	Multidomain topology optimization of finite periodic elastic composites using higher order homogenization method	Chang Liu
MS518	2	7/25(Mon)	16:15	16:30	308A	15	4	150170	Insight of individual powder particles revolution process	Wentao Yan
MS518	2	7/25(Mon)	16:30	16:45	308A	15	5	152312	An Energetically Consistent Concurrent Multiscale Modeling Strategy	Stephen E Lin
MS518	2	7/25(Mon)	16:45	17:00	308A	15	6	152333	Modeling the Mechanical Response of Additive Manufactured Materials Through Void and Grain Microstructural Evolution	Puikei Cheng
MS521	1	7/25(Mon)	17:15	17:45	308A	30	1	150165	Scaling Laws of Nanoporous Gold under Uniaxial Compression	Norbert Huber
MS521	1	7/25(Mon)	17:45	18:00	308A	15	2	151351	Investigation of the microstructure of the aluminum/alumina interfacial layer and an improved interfacial potential	Hai Mei
MS521	1	7/25(Mon)	18:00	18:15	308A	15	3	150833	Numerical and Experimental (EBSD) study of the orientation gradients at grain boundaries of a polycrystalline AKDQ steel sheet	Daniel Pino Muñoz
MS521	1	7/25(Mon)	18:15	18:30	308A	15	4	151718	Nonlinear finite element method for ultra-stiff nano-lattice material considering surface effect	Zhi-ru Rui Fan
MS521	1	7/25(Mon)	18:30	18:45	308A	15	5	151664	A molecular dynamics investigation on Bauschinger effects in single crystal magnesium nanopillars	Shuang Xu
MS521	2	7/25(Mon)	11:00	11:15	314	15	1	151533	Molecular dynamics simulations of the orientation effect on the initial plastic deformation of magnesium single crystals	Qun Zu
MS521	2	7/25(Mon)	11:15	11:30	314	15	2	151841	Matching Boundary Conditions for Two-dimensional Diatomic Square Lattice	Songsong Ji
MS521	2	7/25(Mon)	11:30	11:45	314	15	3	151479	FFT-based Method for Characterization and Analysis of Microstructures and Mechanical Properties from Freeze-Casting Process	Tsung-Hui Huang
MS521	2	7/25(Mon)	11:45	12:00	314	15	4	151316	Shock Compression Behaviors of Boron Carbide via ab initio Calculations	Jun Li
MS521	2	7/25(Mon)	12:00	12:15	314	15	5	151072	Simplified return-mapping scheme and consistent tangent operator for models with the Mohr-Coulomb yield criterion	Martin Cermak
MS522	1	7/26(Tue)	11:00	11:15	308A	15	1	151708	Combined Modeling and Experimental Study on the Delocalized Plastic Flow in Proton-irradiated Metallic Glass	Sunghwan Kim
MS522	1	7/26(Tue)	11:15	11:30	308A	15	2	151438	Negative Poisson's Ratio in Nanoscale Materials	SungYoub Kim

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS522	1	7/26(Tue)	11:30	11:45	308A	15	3	151377	Calculation of fracture properties in nanoscale	Hokun Kim
MS522	1	7/26(Tue)	11:45	12:00	308A	15	4	151235	Single nanoparticle-regulated pinning and de-pinning of the contact line	YingQi Li
MS522	1	7/26(Tue)	12:00	12:15	308A	15	5	150254	Effectiveness of the Young-Laplace equation at nanoscal based on numerical simulation	guoxin cao
MS522	1	7/26(Tue)	12:15	12:30	308A	15	6	150130	High Temperature Crack Tip Plasticity Using Nanomechanical Raman Spectroscopy	Vikas Tomar
MS522	2	7/25(Mon)	17:15	17:30	314	15	1	151230	Nanomechanics of Adsorption, Desorption and Displacement of Shale Gas in Nanopores	Hengan Wu
MS522	2	7/25(Mon)	17:30	17:45	314	15	2	150104	Nanodomains in ferroelectric functional materials - a molecular statics analysis	Florian Endres
MS522	2	7/25(Mon)	17:45	18:00	314	15	3	150519	NONLINEAR VIBRATION OF EMBEDDED ARMCHAIR SINGLE-WALLED CARBON NANOTUBES IN THE MAGNETIC FIELD	ying liu
MS522	2	7/25(Mon)	18:00	18:15	314	15	4	151236	Compression Limit of Two-Dimensional Water Constrained in Graphene Nanocapillaries	YinBo Zhu
MS522	2	7/25(Mon)	18:15	18:30	314	15	5	152342	Study of friction-induced exfoliation of graphene sheets from graphite using molecular dynamics simulation	Cong Ziyu
MS526	1	7/26(Tue)	17:15	17:45	317BC	30	1	150329	Effective viscoelastic properties of ferroelastic composite materials via two-dimensional phase field modeling	Yunche Wang
MS526	1	7/26(Tue)	17:45	18:00	317BC	15	2	152118	Effective properties of multiferroic fibrous composites with imperfect interfaces	Hsin-Yi Kuo
MS526	1	7/26(Tue)	18:00	18:15	317BC	15	3	151774	Theoretical and Experimental Research of Shape Memory Alloy Pipe Joint	wei wang
MS526	1	7/26(Tue)	18:15	18:30	317BC	15	4	150738	The study on shape memory properties of Ni-Ti alloys by molecular dynamics simulation	I-Ling Chang
MS526	1	7/26(Tue)	18:30	18:45	317BC	15	5	150292	The Stress-induced Microstructural Evolution NiTi Shape Memory Alloys	Yang Chia Wei
MS526	2	7/26(Tue)	15:30	16:00	308A	30	1	152112	Multiscale simulation of polycrystalline ferroelectric solids	Yasutomo Uetsuji
MS526	2	7/26(Tue)	16:00	16:15	308A	15	2	150387	Phenomenological and physically motivated constitutive and damage models for ferromagnetic and ferroelectric materials and application to multiferroic composites	Artjom Avakian
MS526	2	7/26(Tue)	16:15	16:30	308A	15	3	150298	A condensed method to model the constitutive behavior of ferroic materials	Stephan Lange
MS526	2	7/26(Tue)	16:30	16:45	308A	15	4	151376	Ginzburg-Landau Theory based Simulations of Relaxor Ferroelectrics	Yangbin Ma
MS526	2	7/26(Tue)	16:45	17:00	308A	15	5	150417	Modeling of the Microstructural Evolution in Ferroelectrics	Nien-Ti Tsou

■ Mini-Symposium Schedule

- Multiscale Multiphysics Problems (MS601~MS699)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS601	1	7/26(Tue)	11:00	11:15	314	15	1	152394	Numerical simulation of the sloshing reduction using Smoothed Particle Hydrodynamics and Multibody Dynamics	Sung-Pill Kim
MS601	1	7/26(Tue)	11:15	11:30	314	15	2	151806	Multi-Component Quasi-Static Ritz vector (MCQSRV) method by using Krylov subspaces and eigenvectors for multibody simulation.	Jun Hwan Kim
MS601	1	7/26(Tue)	11:30	11:45	314	15	3	151142	Performance evaluation of finite element coupled algorithms for structure-electric interaction analysis of MEMS actuator	prakasha Chigahalli Ramegowda
MS601	1	7/26(Tue)	11:45	12:00	314	15	4	150340	Homogenization procedures for coupled thermo-chemo-mechanical problems	Jin Man Mok
MS602	1	7/27(Wed)	17:15	17:45	GBR3	30	1	150121	About particles, multi-scale methods, and continuum theory	Stefan Luding
MS602	1	7/27(Wed)	17:45	18:00	GBR3	15	2	150109	Effect of Non-coaxiality on the Simulation of Strain Localization both in Classical and Cosserat Continua	Xihua Chu
MS602	1	7/27(Wed)	18:00	18:15	GBR3	15	3	150962	Numerical Simulation of Hydraulic Fracturing Based On a Peridynamic Model	Qinglin Duan
MS602	1	7/27(Wed)	18:15	18:30	GBR3	15	4	150214	Material point method for granular flows	Chuanqi Liu
MS602	1	7/27(Wed)	18:30	18:45	GBR3	15	5	150904	Mechanics of lithium intercalation in anode materials using Discrete Element Method	Akhil Vijayan Panicker
MS602	2	7/27(Wed)	11:00	11:30	317BC	30	1	150698	The Second-order Computational Homogenization Methods for Granular Materials	Xikui Li
MS602	2	7/27(Wed)	11:30	11:45	317BC	15	2	151603	Constitutive framework for geomaterials with two-scale porosity	Jinhyun Choo
MS602	2	7/27(Wed)	11:45	12:00	317BC	15	3	152377	Adaptive Bridging Scale Method Coupling Multiscale DEM-FEM Analysis for the Simulation of Failure and Movement Process of Granular Materials	Ke Wan
MS602	2	7/27(Wed)	12:00	12:15	317BC	15	4	151136	Effective thermal conductivity of spherical powder bed: a numerical study	Weijing Dai
MS602	2	7/27(Wed)	12:15	12:30	317BC	15	5	152248	Finite Element Computation of Failure in Geomaterials Using an Embedded Microstructural Model	Xu Gong
MS602	3	7/26(Tue)	17:15	17:45	308A	30	1	150996	A Development of a Stochastic Discrete Element Modelling Framework	Y T FENG
MS602	3	7/26(Tue)	17:45	18:00	308A	15	2	150701	The Evolving Nature of Compaction Bands in Highly Porous Sandstone: A Multiscale View	Jidong Zhao
MS602	3	7/26(Tue)	18:00	18:15	308A	15	3	151280	Modelling of Damping and Heat Transfer in Particle Dampers through DEM	Anand Moorthy
MS602	3	7/26(Tue)	18:15	18:30	308A	15	4	150199	Consolidation and dynamic analysis of the heterogeneous poro-plastic media with the multiscale FEM	Mengkai Lu
MS604	1	7/27(Wed)	15:30	16:00	317BC	30	1	151201	A Mixture Theory Approach to the Modeling of Interstitial Fluid Flow in Brain: Formulation and Numerical Solutions	Francesco Costanzo
MS604	1	7/27(Wed)	16:00	16:15	317BC	15	2	150824	A numerical approach to understand local control of blood perfusion in large microvascular networks	Paola Causin
MS604	1	7/27(Wed)	16:15	16:30	317BC	15	3	150188	Electromagnetc-Multiphase Transient Flow Simulation via VMS approach. Application to Continuous Casting Process.	Luca Marioni
MS604	1	7/27(Wed)	16:30	16:45	317BC	15	4	151885	Modeling the Electromechanical Behavior of Axonal Fiber Bundles	Venkata Ravi Shankara Harsha Teja Garimella
MS604	1	7/27(Wed)	16:45	17:00	317BC	15	5	151922	Chemo-mechanical modeling of Li-ion battery composite electrodes with the finite cell method	Ying Zhao

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS604	2	7/27(Wed)	11:00	11:15	308A	15	1	151868	Efficient Multigrid methods for constrained saddle-point problems arising from multiphysics applications	Rolf Krause
MS604	2	7/27(Wed)	11:15	11:30	308A	15	2	151964	Examination of instabilities in large strain thermoplasticity	Jerzy Pamin
MS604	2	7/27(Wed)	11:30	11:45	308A	15	3	152089	Simulating hydrogen embrittlement and fast pathways for diffusion	James Wesley Foulk III
MS604	2	7/27(Wed)	11:45	12:00	308A	15	4	150290	Numerical Analysis of Pattern Formation in Desiccation Crack Phenomenon by Coupling of Diffusion and Failure	Sayako Hirobe
MS604	2	7/27(Wed)	12:00	12:15	308A	15	5	150889	Variational formulation of coupled thermo-mechanical problems with Local Maximum Entropy approximants	Laurent Stainier
MS605	1	7/28(Thu)	11:00	11:30	317BC	30	1	150479	Uncertainty quantification for multiscale kinetic equations	Shi Jin
MS605	1	7/28(Thu)	11:30	11:45	317BC	15	2	150844	A spherical shell target scheme for laser-driven neutron sources	Minqing He
MS605	1	7/28(Thu)	11:45	12:00	317BC	15	3	152038	An Improved Unified Gas-Kinetic Scheme for Multiscale Flows	Li Shiyi
MS605	1	7/28(Thu)	12:00	12:15	317BC	15	4	150166	Gas-Kinetic Unified Algorithm and Parallel Computation for Aero-dynamics Covering Flow Regimes Solving Boltzmann Model Equation	Zhi-Hui Li
MS605	1	7/28(Thu)	12:15	12:30	317BC	15	5	150319	Numerical Simulation and Theoretical Analysis of Quantum Transport Equation	Tiao Lu
MS605	2	7/27(Wed)	15:30	16:00	308A	30	1	150259	Discrete Boltzmann Modeling, Simulation and Analysis of Complex Flows	Aiguo Xu
MS605	2	7/27(Wed)	16:00	16:15	308A	15	2	150243	Differential Operator Multiplication Method for Solving Differential Equations of Fractional Order	Shaoqiang Tang
MS605	2	7/27(Wed)	16:15	16:30	308A	15	3	152200	Accelerated Multiscale Simulation of Nanoindentation Using Hyper-Quasicontinuum Method	Woo Kyun Kim
MS605	2	7/27(Wed)	16:30	16:45	308A	15	4	150443	Construction and Analysis of Atomistic/Continuum Coupling Method	Lei Zhang
MS606	1	7/27(Wed)	17:15	17:45	308A	30	1	150598	Modeling Magneto- and Electro-active Microstructured Soft Composites	Stephan Rudykh
MS606	1	7/27(Wed)	17:45	18:00	308A	15	2	150770	Simulation of the Influence of the Thermal Environment of Space on a Piezoelectrically Actuated Nanopositioning Platform	Ryan Orszulik
MS606	1	7/27(Wed)	18:00	18:15	308A	15	3	150342	Fracture behavior of a crack interacting with an elliptical inclusion for a bulk superconductor under an electromagnetic force	Feng Xue
MS606	1	7/27(Wed)	18:15	18:30	308A	15	4	151465	Strain-mediated magnetization switching behavior at finite temperature	Min Yi
MS606	2	7/28(Thu)	15:30	15:45	308A	15	1	151380	A viscosity-dependent hydrodynamic model of bubble-propelled catalytic micromotors	Zhen Wang
MS606	2	7/28(Thu)	15:45	16:00	308A	15	2	150533	Pressure Effect on The Structural, Mechanical, Electronic and Thermodynamic Properties of Ba2Bi3 Superconductor from First-principles Calculations	Jin-Jin Cao
MS606	2	7/28(Thu)	16:00	16:15	308A	15	3	150103	Numerical calculation of material configurational forces in three dimensional ferroelectric polycrystals	Qun Li
MS606	2	7/28(Thu)	16:15	16:30	308A	15	4	150251	DNS of Ignition of Ultra-Lean and High EGR Rate Methane-Air Mixture in Turbulence	Naoyuki Saito
MS607	1	7/26(Tue)	15:30	16:00	314	30	1	151107	Biomimetically Pulsating Control of Turbulent Pipe Flow for Drag Reduction	Kaoru Iwamoto
MS607	1	7/26(Tue)	16:00	16:15	314	15	2	152173	Combustion Instability Analysis Based on Exact Disturbance Energy Budget in Turbulent Swirling Premixed Flames	Kozo Aoki
MS607	1	7/26(Tue)	16:15	16:30	314	15	3	152031	Numerical Simulation for Ice Accretion on the Leading Edge of NACA 0012 Airfoil by Means of MPS Method	Hiroya Mamori
MS607	1	7/26(Tue)	16:30	16:45	314	15	4	151729	Effect of the Droplet Deformation and Breakup for Icing on NACA Airfoil in SLD Conditions	Miki Shimura

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS607	1	7/26(Tue)	16:45	17:00	314	15	5	150607	Ultrasonically Rotating Droplet with Moving Particle Semi-implicit and Distributed Point Source Method	Yuji Wada
MS608	1	7/26(Tue)	17:15	17:30	314	15	1	152325	Multiscale simulation of debonding between particles and binders at the electrode in Li-ion batteries	Seungjun Lee
MS608	1	7/26(Tue)	17:30	17:45	314	15	2	151234	Second-Order Two-Scale Asymptotic Analysis for Transient Coupled Thermoelastic Problems of Porous Materials with Radiation	Zihao Yang
MS608	1	7/26(Tue)	17:45	18:00	314	15	3	152019	Multiphysics Analysis of a Steel-Concrete Composite Bridge	Hongrak Pak
MS608	1	7/26(Tue)	18:00	18:15	314	15	4	150848	Effects of Partial Sensor Debonding on System Identification of Smart Composite Laminates	Asif Khan
MS608	1	7/26(Tue)	18:15	18:30	314	15	5	151434	Thermo-Electromechanical Analysis of Composite Plates via Recovery Process of using Stress Resultant Equivalence	Yong-Min Jeong
MS608	1	7/26(Tue)	18:30	18:45	314	15	6	150233	A Stabilized Algorithm for Nonlinear Analysis of Bi-modulus Composites and Wrinkled Membranes	Liang Zhang
MS609	1	7/27(Wed)	11:00	11:15	314	15	1	151584	Numerical studies on the role of stress-diffusion interactions on the fracture and crack growth in Lithium ion battery electrodes using the XFEM	Sundararajan Natarajan
MS609	1	7/27(Wed)	11:15	11:30	314	15	2	150791	Phase Field Simulation of Electrochemically induced Fracture in Li-ion Battery Electrode Materials	Bai-Xiang Xu
MS609	1	7/27(Wed)	11:30	11:45	314	15	3	150786	A three dimensional implicit monolithic finite element formulation of the semiconductor device equations	Budarapu Patabhi
MS610	1	7/27(Wed)	15:30	15:45	314	15	1	151239	Connections between nonlocal constitutive formulations, micromechanical schemes and Saint-Venant's effect for composites under mechanical loading and thermal diffusion	Jianxiang Wang
MS610	1	7/27(Wed)	15:45	16:00	314	15	2	150325	Assessments for modeling and simulating the mechanical behavior of the hierarchical structure materials	Yueguang Wei
MS610	1	7/27(Wed)	16:00	16:15	314	15	3	150297	A Higher-Order Homogenized Model for Elastic Wave Propagation in Bi-Laminate Composite Bar	Leong Hien Poh
MS610	1	7/27(Wed)	16:15	16:30	314	15	4	150061	An efficient cell model for solid and fiber-reinforced composite cylindrical structures	Dinh-Chi Pham
MS610	1	7/27(Wed)	16:30	16:45	314	15	5	150540	Acoustic Cloak based on Pentamode Material with Graded Microstructure	Yi CHEN
MS610	1	7/27(Wed)	16:45	17:00	314	15	6	150969	The mixed finite element method considering flexoelectricity	Feng Deng
MS611	1	7/27(Wed)	11:45	12:00	314	15	4	152087	Effects of elastic strain energy and interfacial stress on the stable morphology of misfit particles in heterogeneous solids	Jianmin Qu
MS611	1	7/27(Wed)	12:00	12:15	314	15	5	151547	Multi-temporal Scale Method Based on Enrichment and Applications to Structural/Material Response Prediction	Dong Qian
MS611	1	7/27(Wed)	12:15	12:30	314	15	6	150985	Multiscale Cohesive Zone model for Crack propagation of Brittle Materials	Shingo Urata
MS613	1	7/28(Thu)	11:00	11:15	314	15	1	151978	Response of biofilament networks dictated by the physical properties of crosslinkers	Yuan Lin
MS613	1	7/28(Thu)	11:15	11:30	314	15	2	151397	Computational Modeling of Sulci Effect During Tumor Growth and Cerebral Edema	Shan Tang
MS613	1	7/28(Thu)	11:30	11:45	314	15	3	150473	Modeling of Active and Passive Microrheology in Polymer Solutions	Tai-Hsi Fan
MS613	1	7/28(Thu)	11:45	12:00	314	15	4	150384	Multiscale modeling and computation of individual and ensemble molecular adhesion	Jin Qian
MS613	1	7/28(Thu)	12:00	12:15	314	15	5	150274	Cell and Nanoparticle Transport in Tumor Microvasculature: the Role of Size, Shape and Surface Functionality of Nanoparticles	Ying Li
MS614	1	7/28(Thu)	11:00	11:30	GBR3	30	1	151887	Computational Homogenization of Fluid-filled Porous Media	Fredrik Larsson
MS614	1	7/28(Thu)	11:30	11:45	GBR3	15	2	152165	FEMxDEM Multi-Scale Modelling with Second Gradient Regularization	Albert Argilaga

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS614	1	7/28(Thu)	11:45	12:00	GBR3	15	3	152215	Large and Small Scale Coupling in Computational Homogenization of Flexible Risers	MT Rahmati
MS614	1	7/28(Thu)	12:00	12:15	GBR3	15	4	152120	Multi-scale computational homogenisation of the fibre-reinforced polymer composites including matrix damage and fibre-matrix decohesion	Zahur Ullah
MS614	1	7/28(Thu)	12:15	12:30	GBR3	15	5	150871	A multiscale computational scheme based on a hybrid discontinuous Galerkin/cohesive zone model for damage and failure of microstructured materials	Van Dung Nguyen
MS614	2	7/28(Thu)	15:30	16:00	GBR3	30	1	151188	Variance reduction approaches for random materials homogenization	Frederic Legoll
MS614	2	7/28(Thu)	16:00	16:15	GBR3	15	2	151017	Wave propagation in glass-rubber granular mixtures	kianoosh Taghizadeh
MS614	2	7/28(Thu)	16:15	16:30	GBR3	15	3	151982	3-D Crystal Plasticity Finite Element Method: Multiscale Modeling of Deformation Response in Magnesium Alloy WE-43	Sriram Ganesan
MS614	2	7/28(Thu)	16:30	16:45	GBR3	15	4	150922	A computational multi-scale model for low-alloyed TRIP-steels	Ashutosh Gandhi
MS614	2	7/28(Thu)	16:45	17:00	GBR3	15	5	150397	An efficient numerical homgenization technique for non-linear polycrystalline materials	Thiago Milanetto Schlittler
MS614	3	7/27(Wed)	17:15	17:30	317BC	15	1	150835	Characterization of magnetorheological elastomers: Linking homogenization with experimentally observable macroscopic behavior	Matthias Rambausek
MS614	3	7/27(Wed)	17:30	17:45	317BC	15	2	151354	A New Rheology-based Constitutive Model representing Glassy and Rubbery States of Thermoplastic Resin	SEISHIRO MATSUBARA
MS614	3	7/27(Wed)	17:45	18:00	317BC	15	3	150906	Bridging micro-macro behavior of photo-responsive polymer: revealing nonlinear photomechanics	Hayoung Chung
MS614	3	7/27(Wed)	18:00	18:15	317BC	15	4	150953	Multiscale based design framework of irradiation pattern on the photo-responsive polymer; a topology optimization	Jaesung Park
MS614	3	7/27(Wed)	18:15	18:30	317BC	15	5	151143	Estimation of the Photo Bending in Liquid-crystal Polymer with Various Wavelength of Light.	Jung-Hoon Yun
MS614	3	7/27(Wed)	18:30	18:45	317BC	15	6	150682	A Multi-Scale Model to Predict Mechanical Behaviour of 2D Textile Ceramic Matrix Composites and Structures	Daxu Zhang
MS614	4	7/29(Fri)	8:30	8:45	308A	15	1	151127	Coupling Nonlinear Diffusion Analysis with XFEM on Lithium ion Batteries	Hoomin Lee
MS614	4	7/29(Fri)	8:45	9:00	308A	15	2	150988	Multiscale Phase Transformation Model Based on First-principles for Cathodes in Li-ion Batteries	Jin-Myoung Lim
MS614	4	7/29(Fri)	9:00	9:15	308A	15	3	151089	An Analysis of Formation of Ferroelastic Phase in Metallic Oxide LSCF in Solid Oxide Fuel Cell	Mayu Muramatsu
MS614	4	7/29(Fri)	9:15	9:30	308A	15	4	150624	Application of Asymptotic Homogenization Method for Masonry	Chao Pian
MS614	4	7/29(Fri)	9:30	9:45	308A	15	5	150355	Heat Jet Approach for Finite Temperature Atomic Simulations of Two-dimensional Square Lattice	Baiyili Liu
MS614	4	7/29(Fri)	9:45	10:00	308A	15	6	150789	Macroscopic yield behavior of 3D Dual-Phase steel microstructures based on statistically similar RVEs	Lisa Scheunemann
MS615	1	7/29(Fri)	8:30	9:00	GBR3	30	1	152129	Mechanical Properties of Graphene Nanoplatelet/Carbon Fiber/Epoxy Hybrid Composites: Multiscale Modeling and Experiments	Gregory Odegard
MS615	1	7/29(Fri)	9:00	9:15	GBR3	15	2	151319	Nonlinear Multiscale Modeling Approach for Graphene/polymer Nanocomposites	Seunghwa Yang
MS615	1	7/29(Fri)	9:15	9:30	GBR3	15	3	151031	Numerical Analysis of Dynamic Responses of Magnesium Based Hybrid Nanocomposites	Xia Zhou
MS615	1	7/29(Fri)	9:30	9:45	GBR3	15	4	151005	Predicting Strength of 3-D Carbon Nanostructures with Various CNT-Graphene Junction Topology via Atomistic Modeling	Sangwook Sohn
MS615	1	7/29(Fri)	9:45	10:00	GBR3	15	5	151848	An atomistic-to-continuum approach to modeling size effects in polymer-carbon nanotube composites	Angelo Simone
MS615	2	7/28(Thu)	15:30	15:45	317BC	15	1	150859	Multi-Scale Computational Modeling of Filled Rubber Composite with Coarse Grained Molecular Dynamics and Large Scale FEM Analyses	Hiroshi Kadowaki

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS615	2	7/28(Thu)	15:45	16:00	317BC	15	2	150853	A method to estimate resistance tensor distribution of piezoresistive nanocomposites from boundary electrodes in two dimensions	Hyosang Lee
MS615	2	7/28(Thu)	16:00	16:15	317BC	15	3	150455	Morphology study on the electrical percolation of CNT/polymer nanocomposites	Angel Mora
MS615	2	7/28(Thu)	16:15	16:30	317BC	15	4	150811	Statistical Multiscale Homogenization Analysis of Polymer Nanocomposites including Percolated Interphase	Hyunseong Shin
MS615	2	7/28(Thu)	16:30	16:45	317BC	15	5	150903	A Multiscale Design Approach for the Optically Actuated Polymer Nanocomposites and the Associated Interphases	Joonmyung Choi
MS615	2	7/28(Thu)	16:45	17:00	317BC	15	6	151103	Photo-mechanical and thermal responses of liquid crystal polymer-carbon nanotube composites: A molecular dynamics study	Junghwan Moon
MS616	1	7/28(Thu)	15:30	16:00	314	30	1	151385	Multiscale Molecular Simulation of Small Molecule Organic Solar Cells	Chun-Wei Pao
MS616	1	7/28(Thu)	16:00	16:15	314	15	2	150718	Continuum Framework for Dislocation Structure, Energy and Dynamics of Dislocation Arrays and Low Angle Grain Boundaries	Luchan Zhang
MS616	1	7/28(Thu)	16:15	16:30	314	15	3	151901	Finite strain phase field modeling of structural length scales in polymer blends by means of mixed incremental potentials	Andreas Krischok
MS616	1	7/28(Thu)	16:30	16:45	314	15	4	151521	Atomistic Study and Theoretical Model for Nanoindentation Size Effects	Chi-Hua Yu
MS616	1	7/28(Thu)	16:45	17:00	314	15	5	150578	Hydrogen adsorption at grain boundaries: a space-tessellation based structural analysis and chemomechanical origin of hydrogen trapping	Jun Song
MS617	1	7/29(Fri)	8:30	9:00	314	30	1	151068	High-Order Triple-Scale Method for Composite Structures of The Configurations with Small Periodicities of Two-levels	Junzhi Cui
MS617	1	7/29(Fri)	9:00	9:15	314	15	2	151168	Upscaling Creep of Calcium-Silicate-Hydrates to Creep of Concrete by Means of Homogenization Schemes	Bernhard Pichler
MS617	1	7/29(Fri)	9:15	9:30	314	15	3	151799	Comparison between inverse problem algorithms for computational simulation of thermo-mechanical behavior of concrete	Ruben Alcides Lopez Santacruz
MS617	1	7/29(Fri)	9:30	9:45	314	15	4	152300	Multi-scale stochastic porous media modeling via the Micro-dilatation theory: Concrete materials application	Jena JEONG
MS617	1	7/29(Fri)	9:45	10:00	314	15	5	150847	Sensitivity analysis of temperature and gas pressure to some material parameters for concrete exposed to fire	Fengdi Guo
MS618	1	7/25(Mon)	17:15	17:30	317BC	15	1	150309	Surface Effect Analysis and Correction in Peridynamics	Pablo Seleson
MS618	1	7/25(Mon)	17:30	17:45	317BC	15	2	150524	An optimization-based coupling of local and nonlocal continuum models	Marta D'Elia
MS618	1	7/25(Mon)	17:45	18:00	317BC	15	3	150129	Coupling peridynamics with damage mechanics to achieve objective simulation of material failure	Fei Han
MS618	1	7/25(Mon)	18:00	18:15	317BC	15	4	150807	Peridynamic Modeling of Multilayered Glass with Polyurethane	TaeSik Ahn
MS618	1	7/25(Mon)	18:15	18:30	317BC	15	5	150667	A non-ordinary state-based peridynamics formulation corresponding to HJC concrete model	Xin Gu
MS618	1	7/25(Mon)	18:30	18:45	317BC	15	6	150079	Modeling ductile materials with the bond-based Softening peridynamic model	Patrick Diehl
MS618	2	7/25(Mon)	11:00	11:15	317A	15	1	150673	Peridynamic Multiscale Finite Element Methods	David Littlewood
MS618	2	7/25(Mon)	11:15	11:30	317A	15	2	150308	Electrokinetic Flow in Complex Geometries using Consistent Incompressible Smoothed Particle Hydrodynamics	Kyungjoo Kim
MS618	2	7/25(Mon)	11:30	11:45	317A	15	3	150369	Band Structures of In-plane Wave of 1D Nanoscale Piezoelectric Phononic Crystals	Ali Chen
MS618	2	7/25(Mon)	11:45	12:00	317A	15	4	152339	Multiresolution Continuum Theory for Metal Cutting Simulation with a Dislocation Based Plasticity Law	Orion Landauer Kafka
MS618	2	7/25(Mon)	12:00	12:15	317A	15	5	151453	Multiscale Modeling of the Mechanical Behavior of Electrical Conductors	Durand Baptiste

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS619	1	7/25(Mon)	11:00	- 11:30	315	30	1	151900	Two-scale model of masonry structures and its execution on parallel computers	Jaroslav Kruis
MS619	1	7/25(Mon)	11:30	- 11:45	315	15	2	151890	Multi-scale Approach to 3D Analysis of Transport Processes in Masonry Structures	Tomas Krejci
MS619	1	7/25(Mon)	11:45	- 12:00	315	15	3	151865	Enhanced first-order homogenization approach for the simulation of microstructured composites	Xavier Martinez
MS619	1	7/25(Mon)	12:00	- 12:15	315	15	4	151151	MD simulations study of nano-indentation on nanotwinned cubic boron nitride	bo yin Zhao
MS619	1	7/25(Mon)	12:15	- 12:30	315	15	5	150315	The Schwarz Alternating Method for Concurrent Multiscale in Finite Deformation Solid Mechanics	Alejandro Mota
MS620	1	7/25(Mon)	15:30	- 15:45	315	15	1	150945	Multiscale Study for Interphase Characterization of Epoxy Nanocomposites with Crosslink Density	Byungjo Kim
MS620	1	7/25(Mon)	15:45	- 16:00	315	15	2	150305	New finite element developments for the full field modeling of microstructural evolutions using the level set method	Benjamin Scholtes
MS620	1	7/25(Mon)	16:00	- 16:15	315	15	3	150304	A Diffusion-Deformation Multiphase Field Model for Elastoplastic Materials Applied to the Growth of Cu ₆ Sn ₅	Johan Hektor
MS620	1	7/25(Mon)	16:15	- 16:30	315	15	4	150164	Combined level set and ab-initio modeling of grain structure and texture evolution during self-annealing in thin Cu films	Håkan Hallberg

■ Mini-Symposium Schedule

- Numerical Method and High-Performance Computing (MS701~MS799)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS701	1	7/25(Mon)	17:15	17:30	315	15	1	150263	Numerical Analysis and Design of Structures under Consideration of Polymorphic Uncertain Data	Wolfgang Graf
MS701	1	7/25(Mon)	17:30	17:45	315	15	2	150845	Modeliling Large Scale Engineering Applications with the Uintah Code	Martin Berzins
MS701	1	7/25(Mon)	17:45	18:00	315	15	3	151077	Robust Structural Analysis and Design under Multivariate Polymorphic Uncertainty Using Moment Relaxations and Semidefinite Programming	Arne-Jens Hempel
MS701	1	7/25(Mon)	18:00	18:15	315	15	4	150574	On the Impact of the Correlation Length on the Buckling Behaviour of Thin Walled Structures with Randomly Distributed Imperfections	Marc Fina
MS702	1	7/25(Mon)	11:00	11:30	GBR5	30	1	152429	Numerical modelling of ductile failure using a phase-field approach	Jose Cesar de Sa
MS702	1	7/25(Mon)	11:30	11:45	GBR5	15	2	150792	Accurate integration points for cut higher-order elements with Chen-Babuska nodes	Thomas-Peter Fries
MS702	1	7/25(Mon)	11:45	12:00	GBR5	15	3	150238	Partition of Unity Isogeometric Analysis of elliptic singular perturbation problems	Hae-Soo Oh
MS702	1	7/25(Mon)	12:00	12:15	GBR5	15	4	152329	A new enriched formulation for strong discontinuities	Alejandro Marcos Aragón
MS702	1	7/25(Mon)	12:15	12:30	GBR5	15	5	152436	Stabilization method for Neumann boundaries under the Cartesian Grid-based Finite Element method framework	Enrique Nadal Soriano
MS702	2	7/26(Tue)	15:30	15:45	318BC	15	1	150675	Robust GFEM/XFEM and its applications to dynamic arbitrary crack propagation simulation	Rong Tian
MS702	2	7/26(Tue)	15:45	16:00	318BC	15	2	150187	Delamination and transverse crack growth prediction for laminated composite plates and shells	Dinghe Li
MS702	2	7/26(Tue)	16:00	16:15	318BC	15	3	151032	Magnetostatic XFEM Analysis for Internal Multiple Cracks based on Joukowski Mapping	Shogo Nakasumi
MS702	2	7/26(Tue)	16:15	16:30	318BC	15	4	150917	Implicit Time Integration Schemes for the FEM Simulation of Fast Rotating Structures	Markus Kober
MS702	3	7/27(Wed)	15:30	15:45	317A	15	1	150781	Mechanics of crushable assembly - a coupled XFEM-DEM approach	HIRSHIKESH
MS702	3	7/27(Wed)	15:45	16:00	317A	15	2	150665	Numerical Simulation of Stefan Problem Coupled with Mass Transport Problem through XFEM/Level Set Method	Min Li
MS702	3	7/27(Wed)	16:00	16:15	317A	15	3	150406	A Finite Strain Discrete Fiber Approach to Reinforced Composite Materials	Mohsen Goudarzi
MS702	3	7/27(Wed)	16:15	16:30	317A	15	4	150337	A New High Accuracy and Low Memory Consumption CIP Interpolation on Soroban Mesh	Daiki Ajima
MS703	1	7/25(Mon)	17:15	17:45	318BC	30	1	150271	Mesh Infrastructure for Massively Parallel Adaptive Simulations	Mark S. Shephard
MS703	1	7/25(Mon)	17:45	18:00	318BC	15	2	150929	A Simple Linear Tetrahedral Finite Element for Incompressible Solid Dynamics: A Variational Multiscale Approach	Guglielmo Scovazzi
MS703	1	7/25(Mon)	18:00	18:15	318BC	15	3	151226	A variational multiscale FEM for monolithic ALE computations of shock hydrodynamics	Xianyi Zeng
MS703	1	7/25(Mon)	18:15	18:30	318BC	15	4	150726	A first order hyperbolic framework for large strain computational solid dynamics in OpenFOAM	Muhammad Jibrán Haider
MS703	1	7/25(Mon)	18:30	18:45	318BC	15	5	150054	Edge-based Parallel Code For CSEM Surveys In Geophysics: Performance And Accuracy Improvements	Octavio Castillo Reyes
MS703	2	7/26(Tue)	17:15	17:30	315	15	1	152307	Drape Simulation by Solid-shell Finite Elements and Adaptive Meshing	Xie Qing

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS703	2	7/26(Tue)	17:30	17:45	315	15	2	151817	A Locking-free and Pressure Oscillation-free Elasto-plastic Large Deformation Analysis using F-barES-FEM-T4	Yuki Onishi
MS703	2	7/26(Tue)	17:45	18:00	315	15	3	151331	Performance Evaluation of F-barES-FEM-T4 in Dynamic Analysis	Ryoya IIDA
MS704	1	7/26(Tue)	15:30	15:45	315	15	1	152332	PyMIP: A Python Module to integrate C, Fortran, CUDA and OpenCL codes	Ki-Hwan Kim
MS704	1	7/26(Tue)	15:45	16:00	315	15	2	151244	Efficient hardware-accelerated direct linear system solver for 3D FDFD photonic device analysis	Cheng-Han Du
MS704	1	7/26(Tue)	16:00	16:15	315	15	3	151132	Parallelization of a Split-Flux Finite-Volume Scheme with Splined Immersed Boundary Method On Multiple Graphics Processor Units	Fang-An Kuo
MS704	1	7/26(Tue)	16:15	16:30	315	15	4	151091	Modelling Non-equilibrium Rarefied Gas Flows Using the Parallel Direct Simulation Monte Carlo Method	Cheng-Chin Su
MS705	1	7/26(Tue)	18:00	18:15	305	15	4	152179	Computational Limit Analysis of Pressure Vessels Containing Volume Defects under High Temperature	Yinghua Liu
MS705	1	7/26(Tue)	18:15	18:30	305	15	5	150646	An adaptive strain-driven strategy for plastic collapse analysis	Hung Xuan Nguyen
MS705	1	7/26(Tue)	18:30	18:45	305	15	6	150386	Mixed Smoothed and Composite FEM Models for Limit and Shakedown Analysis	Hung Xuan Nguyen
MS706	1	7/25(Mon)	15:30	16:00	318BC	30	1	150278	Shape Functions for Surface Elements Based on Trigonometric Functions	Xiao-Wei Gao
MS706	1	7/25(Mon)	16:00	16:15	318BC	15	2	151987	2-D Green's Functions in T-D and BEM for a Porous Medium	Boyang Ding
MS706	1	7/25(Mon)	16:15	16:30	318BC	15	3	151779	A topology optimisation in acoustic-structure interaction problems with a BEM-FEM coupled solver	Hiroshi Isakari
MS706	1	7/25(Mon)	16:30	16:45	318BC	15	4	151474	Some Investigations on the Fictitious Eigenfrequency Phenomenon of the Boundary Integral Equations	Chang-Jun Zheng
MS706	1	7/25(Mon)	16:45	17:00	318BC	15	5	151389	Applications of Clifford algebra valued boundary integral equations to electromagnetic scattering problems	Jia-Wei Lee
MS706	2	7/25(Mon)	17:15	17:45	317A	30	1	151069	Singular Boundary Method for periodic wave propagation analysis	Zhuo-Jia Fu
MS706	2	7/25(Mon)	17:45	18:00	317A	15	2	151291	Quaternion valued dual boundary integral equations for three-dimensional magnetostatics with degenerate boundary	Yi-Chuan Kao
MS706	2	7/25(Mon)	18:00	18:15	317A	15	3	151133	Modified Boundary Element Method for Calculating Near and Far-field Time-harmonic Green's Function in Half-space	Yihui DA
MS706	2	7/25(Mon)	18:15	18:30	317A	15	4	150876	A Boundary Element-Finite Element Coupling Model for Soil-Structure Interaction Analysis of Nuclear Power Plant	Liqi Liu
MS706	2	7/25(Mon)	18:30	18:45	317A	15	5	150649	Fast Boundary Element Method for Modeling Crack Propagations	Yijun Liu
MS707	1	7/26(Tue)	11:00	11:15	317A	15	1	151404	Framework for Building Parallel-in-Time Integration Simulators	Mikio Iizuka
MS707	1	7/26(Tue)	11:15	11:30	317A	15	2	151650	An Implementation of Balancing Domain Decomposition Method for Peta-scale Finite Element Analysis	Tomonori Yamada
MS707	1	7/26(Tue)	11:30	11:45	317A	15	3	152306	A Template Based General Purpose Software Architecture for Multi-physics Analysis	Zhaosong Ma
MS707	1	7/26(Tue)	11:45	12:00	317A	15	4	152304	Scalable parallel Grand Canonical Monte Carlo simulation using MPI maps: Micro-pollutant adsorption objective	Hamidreza RAMEZANI
MS707	1	7/26(Tue)	12:00	12:15	317A	15	5	151913	Development of Visualization Application for Human Heart Simulation	Masahiro Watanabe
MS707	1	7/26(Tue)	12:15	12:30	317A	15	6	151210	Development of high resolution visualization library for Exa-scale supercomputer	YOSHITAKA WADA
MS707	2	7/27(Wed)	11:00	11:15	315	15	1	151463	Random projection algorithm for large-scale computational plasticity problems	Jianyu LI

Session	Session No.	Date	Start Time	Finsh Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS707	2	7/27(Wed)	11:15	11:30	315	15	2	151011	A Robust Formulation for Small Sliding Contact Problems in Extrinsic Cohesive Modeling	Mengyan Zang
MS707	2	7/27(Wed)	11:30	11:45	315	15	3	151001	Efficient Parallel Generation of Random Field of Mechanical Properties for Geophysical Application	Luciano de Carvalho Paludo
MS711	1	7/27(Wed)	15:30	15:45	315	15	1	151311	Finite element study of torsion of non- circular cylinder with new type of constitutive relations	Sellam M
MS711	1	7/27(Wed)	15:45	16:00	315	15	2	151303	Linear smoothing over arbitrary polytopes	AMRITA FRANCIS
MS711	1	7/27(Wed)	16:00	16:15	315	15	3	151846	Finite Element Analysis of Polyhedral Meshes Generated by an Element-Carving Technique with Local Mesh Refinement	Dongwoo Sohn
MS711	1	7/27(Wed)	16:15	16:30	315	15	4	150411	Development and Applications of a Novel Efficient Approach of Trimmed Hexahedral Elements for Three-Dimensional Finite Element analysis	Son Hoang Nguyen
MS711	1	7/27(Wed)	16:30	16:45	315	15	5	150794	Adaptivity and Error Control for the Polygonal Finite Element Using Recovery-based Error Estimates	Octavio Andrés González-Estrada
MS712	1	7/29(Fri)	8:30	9:00	317A	30	1	152160	A hybridized discontinuous Galerkin method for magnetohydrodynamics equation	Jeonghun John Lee
MS712	1	7/29(Fri)	9:00	9:15	317A	15	2	152360	Stabilization of HDG methods for nonlinear elasticity	Jiguang Shen
MS712	1	7/29(Fri)	9:15	9:30	317A	15	3	152225	Performance of Differentiable and Non-Differentiable Slope Limiters for Discontinuous Galerkin Methods	Abolfazl Karchani
MS712	2	7/27(Wed)	17:15	17:45	315	30	1	151888	Higher Order Immersed Discontinuous Galerkin Methods for Interface Problems	Slimane Adjerid
MS712	2	7/27(Wed)	17:45	18:00	315	15	2	150750	eXtended Hybridizable Discontinuous Galerkin (X-HDG) for Bimaterial Problems	Ceren GÜRKAN
MS712	2	7/27(Wed)	18:00	18:15	315	15	3	151403	Entropy Stable Discontinuous Galerkin Scheme for Systems of Convection-Diffusion	Mohammad Zakerzadeh
MS713	1	7/28(Thu)	11:00	11:15	315	15	1	151661	A stabilization technique for coupled convection-diffusion-reaction equations	Hector Hernandez
MS713	1	7/28(Thu)	11:15	11:30	315	15	2	151565	Axial Green's function Methods on Irregular Grids	Do Wan Kim
MS713	1	7/28(Thu)	11:30	11:45	315	15	3	151253	Long Time Behavior of Solutions to the Discrete p-Laplacian Parabolic Equations involving Nonlinear Absorption	Jea-Hyun Park
MS714	1	7/26(Tue)	17:15	17:45	317A	30	1	150681	Robust domain decomposition methods for non-symmetric problems	Christophe Bovet
MS714	1	7/26(Tue)	17:45	18:00	317A	15	2	151085	Performance Evaluation of a Scaled-BDD on Distributed-Memory Parallel Computers	Masao Ogino
MS714	1	7/26(Tue)	18:00	18:15	317A	15	3	150183	Application of the BDD-DIAG Preconditioner to Domain Decomposition Analysis for Magnetostatic Problems	Hiroshi Kanayama
MS714	2	7/28(Thu)	15:30	15:45	315	15	1	151178	Improvements of a parallel finite element code for efficient data compression and visualization	Lijun Liu
MS714	2	7/28(Thu)	15:45	16:00	315	15	2	151114	Hierarchical Domain Decomposition Method with the Moving Bodies	Shin-ichiro SUGIMOTO
MS714	2	7/28(Thu)	16:00	16:15	315	15	3	152035	High-accuracy Full-wave Electromagnetic Simulation using Anatomical Human Models	Amane Takei
MS714	2	7/28(Thu)	16:15	16:30	315	15	4	151526	Large-scale Simulation of Carotid Hemodynamics by a Parallel Domain Decomposition Method	Qinghe Yao
MS715	1	7/26(Tue)	11:00	11:30	318BC	30	1	151483	A Two-level Additive Schwarz Preconditioner for Partition of Unity Methods	Susanne C. Brenner
MS715	1	7/26(Tue)	11:30	11:45	318BC	15	2	151753	Overlapping Schwarz preconditioners for Isogeometric collocation methods	Durkbin Cho
MS715	1	7/26(Tue)	11:45	12:00	318BC	15	3	151252	A parameter study of a non-linear multi-scale strategy for the simulation of buckling, delamination and rolling shear failure in laminated composites	Karin Saavedra

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS715	1	7/26(Tue)	12:00	12:15	318BC	15	4	151079	A Nonoverlapping Domain Decomposition Method for a Discontinuous Galerkin Method	Eun-Hee Park
MS715	2	7/27(Wed)	11:00	11:30	317A	30	1	151727	Adaptive Coarse Spaces for FETI-DP in Three Dimensions	Axel Klawonn
MS715	2	7/27(Wed)	11:30	11:45	317A	15	2	152345	Adaptive Choice of Primal Constraints for BDDC Domain Decomposition Algorithms	Olof B. Widlund
MS715	2	7/27(Wed)	11:45	12:00	317A	15	3	150492	Development of Parallelized Multi-Body Dynamic Analysis Based on FETI-Local Method for Precise Structural Analysis of FlappingWing	Haeseong Cho
MS715	2	7/27(Wed)	12:00	12:15	317A	15	4	150941	Parallel Multilevel Iterative Methods for Coupled PDEs	Chen-Song Zhang
MS715	2	7/27(Wed)	12:15	12:30	317A	15	5	150067	Fast solvers for multiscale problems	Hyea Hyun Kim
MS716	1	7/25(Mon)	11:00	11:30	318BC	30	1	151360	Development of Large-Scale Scientific & Engineering Applications on Post-Peta/Exascale Systems using ppOpen-HPC	Kengo Nakajima
MS716	1	7/25(Mon)	11:30	11:45	318BC	15	2	151088	Efficient index computation with elegant pairing: an application in communication-free edge-based tetrahedral mesh multiplication	Renato N. Elias
MS716	1	7/25(Mon)	11:45	12:00	318BC	15	3	151608	petaPar: A Petascale meshfree/particle simulation system	Rong Tian
MS716	1	7/25(Mon)	12:00	12:15	318BC	15	4	151272	A Data Mining Framework for Unsteady Flow Data	Lijun Xie
MS716	1	7/25(Mon)	12:15	12:30	318BC	15	5	150964	Aspects of Large-scale Fully-coupled AMG Preconditioned FE Magnetohydrodynamic Simulations Enabled Through Trilinos	Paul Lin
MS716	2	7/25(Mon)	15:30	15:45	317A	15	1	151585	Development of Two-dimensional Geometrically Nonlinear Beam Based on Co-rotational Framework for Web-based Implementation	SANGJOON SHIN
MS716	2	7/25(Mon)	15:45	16:00	317A	15	2	150648	Multi-Disciplinary Shape Optimization of Air-breathing Hypersonic Vehicle Using Pareto Games and Evolutionary Algorithms	Zhili Tang
MS716	2	7/25(Mon)	16:00	16:15	317A	15	3	150936	Block Preconditioners for Mixed Discretization MHD and Continuum Plasma Simulations Enabled by Teko	Edward Geoffrey Phillips
MS716	2	7/25(Mon)	16:15	16:30	317A	15	4	151117	Recent Advances in Parallel Unstructured Mesh Generation for Large-Scale Aerodynamics Simulations	Jianjing Zheng
MS718	1	7/29(Fri)	8:30	9:00	315	30	1	152303	A Large Scale CFD Analysis on Unsteady Flows of a Steam Turbine Stage and Their Blades with Circumferentially Non-uniform Flow Conditions	Tadashi Tanuma
MS718	1	7/29(Fri)	9:00	9:15	315	15	2	152221	Large-Scale Finite Element Analysis for Predicting Thermal Warpage of a Semiconductor Package Substrate	Shinji Nakazawa
MS718	1	7/29(Fri)	9:15	9:30	315	15	3	151530	Fault Displacement Simulation of the Kamishiro Fault Earthquake Using the Stress Drop Distribution of the Source Inversion	Yuta Mitsuhashi
MS718	1	7/29(Fri)	9:30	9:45	315	15	4	151505	Monolithic Thermomechanical Coupling Analysis of Polymer Materials with Internal Frictional Heating under Sinusoidal Loads	Tatsuhiro Shono
MS718	1	7/29(Fri)	9:45	10:00	315	15	5	152099	Web-based interactive CAE service software using WebGL	Yu Ihara
MS719	1	7/26(Tue)	17:15	17:45	318BC	30	1	150148	On scalable space-time balancing domain-decomposition solvers	Santiago Badia
MS719	1	7/26(Tue)	17:45	18:00	318BC	15	2	152311	A parallel implementation of a Multi-Scale FEM x DEM method for geomaterials	Jacques JM Desrues
MS719	1	7/26(Tue)	18:00	18:15	318BC	15	3	151936	On the efficiency of parallel incompressible Navier-Stokes solvers in the framework of anisotropic adaptive finite elements	Youssef Mesri
MS719	1	7/26(Tue)	18:15	18:30	318BC	15	4	151761	An Analysis Model for Evaluating the Thermal Performance of Micro-truss Sandwich panels Made by 3D Printing	Wenjong Chen
MS719	1	7/26(Tue)	18:30	18:45	318BC	15	5	151741	Storing Techniques for Sparse Matrices-A Study on Thermal-Convection Problems	Abul Mukid Mohammad Mukaddes
MS719	2	7/27(Wed)	17:15	17:45	317A	30	1	152008	Mixed Precision Implementation of Coarse Inverse Approach in BDD Pre-conditioner	Hiroshi Kawai

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MS719	2	7/27(Wed)	17:45	18:00	317A	15	2	152041	Performance Evaluation of ADVENTURE_Solid and ADVENTURE_Thermal on the K computer	Hongjie Zheng
MS719	2	7/27(Wed)	18:00	18:15	317A	15	3	151395	Prediction of Analysis Results with Deep Learning	Masato Masuda
MS719	2	7/27(Wed)	18:15	18:30	317A	15	4	151096	A New Method Applied to the 8-Node Flat Shell Element to Improve the Calculation Accuracy	Yunfei Liu
MS720	1	7/28(Thu)	11:45	12:00	315	15	4	150258	High-order numerical simulation of compressible flows with immersed boundaries: The steady case	Björn Müller
MS720	1	7/28(Thu)	12:00	12:15	315	15	5	150398	High-order numerical simulation of compressible flows with immersed boundaries: The unsteady case	Stephan Krämer-Eis
MS720	1	7/28(Thu)	12:15	12:30	315	15	6	150349	Level-Set Algorithms for an Extended DG Method	Thomas Utz
MS721	1	7/27(Wed)	11:00	11:30	318BC	30	1	150972	High-Order Space-Time Methods for Computational Fluid Dynamics	H. T. Huynh
MS721	1	7/27(Wed)	11:30	11:45	318BC	15	2	150838	High-Order Discontinuous Galerkin RANS computations for turbomachinery applications	Stefano Rebay
MS721	1	7/27(Wed)	11:45	12:00	318BC	15	3	150771	Recent Progresses Enabling Large Eddy Simulations with Discontinuous High-Order Methods	Z.J. Wang
MS721	1	7/27(Wed)	12:00	12:15	318BC	15	4	151286	Recent advances on stabilized finite element methods for compressible flow problems: steady and unsteady high order methods	Remi Abgrall
MS721	1	7/27(Wed)	12:15	12:30	318BC	15	5	150684	An Adaptive High-Order Finite Element Method for Robust Computational Fluid Dynamics	Krzysztof Fidkowski
MS721	2	7/28(Thu)	11:00	11:15	317A	15	1	151436	A fully discrete adjoint Discontinuous Galerkin method for PDE-constrained time-periodic optimization	Per-Olof Persson
MS721	2	7/28(Thu)	11:15	11:30	317A	15	2	150727	High-order DG-FEM for Micro-Macro Partitioned Kinetic Models	James Rossmann
MS721	2	7/28(Thu)	11:30	11:45	317A	15	3	151217	Anti-Aliasing of Flux Reconstruction Schemes in Rotating Curved Elements	Jin Seok Park
MS721	2	7/28(Thu)	11:45	12:00	317A	15	4	151378	On the Stability and Accuracy of Flux Reconstruction Schemes for Implicit Large Eddy simulation of Turbulent Flows	Brian C Vermeire
MS721	2	7/28(Thu)	12:00	12:15	317A	15	5	151207	Generation of Curvilinear Meshes with Appropriate Geometrical and Numerical Properties	Thomas Toulorge
MS721	2	7/28(Thu)	12:15	12:30	317A	15	6	150905	An attempt to innovate Godunov Method	Ziyao Sun
MS722	1	7/25(Mon)	15:30	15:45	320	15	1	152026	Cell Polarization Simulation for Analysis of Dielectrophoretic Characterization	Minjoong Jeong
MS722	1	7/25(Mon)	15:45	16:00	320	15	2	151823	Accelerating the Performance of Implicit Velocity Decoupling Solver for the Incompressible Navier-Stokes Equations on GPU using OpenACC	Ji-Hoon Kang
MS722	1	7/25(Mon)	16:00	16:15	320	15	3	151764	Modeling of Si:P Alloys using High Performance Computers for Designs of Si-based Quantum Computers	Hoon Ryu
MS722	1	7/25(Mon)	16:15	16:30	320	15	4	151989	On the active sites of Au and Ag nanoparticle catalysts for CO2 electroreduction to CO	Seoin Back
MS722	1	7/25(Mon)	16:30	16:45	320	15	5	151681	Implications for the residue interaction networks and dynamics of D816V/H mutations in c-KIT receptor	Cheolhee Kim
MS722	1	7/25(Mon)	16:45	17:00	320	15	6	152265	Ferromagnetic Graphene Nanoribbons Covalently Terminated with Organic Radicals: Controlling Radical-Edge Interaction	Daeheum Cho
MS724	1	7/28(Thu)	15:30	16:00	317A	30	1	151182	Seamless Integration of Isogeometric Analysis, Topology Optimization and Manufacturing using a Unified Model	Ping Hu
MS724	1	7/28(Thu)	16:00	16:15	317A	15	2	150084	Semi Analysis-suitable T-splines	Xin Li
MS724	1	7/28(Thu)	16:15	16:30	317A	15	3	150919	A parametric mesh editing method for shape optimization	Lei Yang

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MS724	1	7/28(Thu)	16:30	16:45	317A	15	4	150367	Report on an effective locking free Timoshenko beam formulation in isogeometric analysis	Qingyuan Hu
MS724	2	7/27(Wed)	15:30	16:00	320	30	1	151045	Advances and Challenges in Volumetric T-spline Parameterization for Isogeometric Analysis	Yongjie Jessica Zhang
MS724	2	7/27(Wed)	16:00	16:15	320	15	2	150809	Generalized isogeometric shape sensitivity analysis for multi-patch shell structures	Jeong Min Noh
MS724	2	7/27(Wed)	16:15	16:30	320	15	3	150976	Bi-directional evolutionary method using NURBS interpolation for optimal design of 3D continuum structures	Xuan Wang
MS724	2	7/27(Wed)	16:30	16:45	320	15	4	151417	Converting an unstructured mesh to a standard T-spline Surface with Feature Preservation using One-step Inverse Method and T-splines	Yundong Gai
MS725	1	7/25(Mon)	15:30	16:00	GBR5	30	1	151221	Some Recent Developments in the Isogeometric Analysis of Fluids, Structures, and Coupled Problems	Yuri Bazilevs
MS725	1	7/25(Mon)	16:00	16:15	GBR5	15	2	150354	Spline-based Finite Element Methods in Fluid-Structure-Interaction	Stefanie Elgeti
MS725	1	7/25(Mon)	16:15	16:30	GBR5	15	3	151124	Aorta FSI Analysis with the Element-Based Zero-Stress State Estimation and Isogeometric Discretization	Takafumi Sasaki
MS725	1	7/25(Mon)	16:30	16:45	GBR5	15	4	151257	Heart Valve Flow Analysis with Space-Time Interface-Tracking with Topology Change and Isogeometric Discretization	Takuya Terahara
MS725	1	7/25(Mon)	16:45	17:00	GBR5	15	5	151260	Tire Aerodynamic Analysis with Space-Time Interface-Tracking with Topology Change, Slip Interfaces and Isogeometric Discretization	Takashi Kuraishi
MS725	2	7/25(Mon)	17:15	17:45	GBR5	30	1	152095	A posteriori error estimation of divergence-compatible isogeometric methods for Stokes flow	Trond Kvamsdal
MS725	2	7/25(Mon)	17:45	18:00	GBR5	15	2	150740	Adaptive Isogeometric Analysis for Large-Displacement, Distributed Plasticity Analysis of Frames	Ning Liu
MS725	2	7/25(Mon)	18:00	18:15	GBR5	15	3	151369	Refined Isogeometric Analysis (rIGA): Improved Performance of Direct Solvers by Controlling Continuity	Daniel Alfonso Garcia Lozano
MS725	2	7/25(Mon)	18:15	18:30	GBR5	15	4	150663	Approximate dual basis functions for B-splines	Wolfgang Dornisch
MS725	2	7/25(Mon)	18:30	18:45	GBR5	15	5	150907	Integrating CAD and Numerical Analysis: 'Dirty Geometry' handling using the Finite Cell Method	Shuohui yin
MS725	3	7/26(Tue)	15:30	15:45	317A	15	1	152435	IGA collocation, aka "the ultimate reduced quadrature IGA method": Some results, applications, and open problems	Alessandro Reali
MS725	3	7/26(Tue)	15:45	16:00	317A	15	2	152096	Configurational Optimization using THB-splines based Enriched Isogeometric Analysis	Ganesh Subbarayan
MS725	3	7/26(Tue)	16:00	16:15	317A	15	3	151073	Blending Isogeometric and Lagrangian Elements in Three-Dimensional Analysis	Jianli Ge
MS725	3	7/26(Tue)	16:15	16:30	317A	15	4	150883	AiCAD in the context of Rapid CAx	Michael Breitenberger
MS725	3	7/26(Tue)	16:30	16:45	317A	15	5	151162	Structural and Fluid Mechanics Isogeometric Analysis of a Disk-Gap-Band Parachute at Mach 1.4–2.0	Taro Kanai
MS725	3	7/26(Tue)	16:45	17:00	317A	15	6	152362	Enriched Isogeometric Analysis (EIGA) on B-rep Geometries using Algebraic Level Sets	Chun-Pei Chen
MS727	1	7/26(Tue)	11:00	11:15	320	15	1	151300	Enhanced Extended Finite Element Method and Applications in the Modeling of Fracking	Zhanli Liu
MS727	1	7/26(Tue)	11:15	11:30	320	15	2	151836	Coupled analytical and extended finite element method (CA-XFEM) for cracked solids	Jian-Ying Wu
MS727	1	7/26(Tue)	11:30	11:45	320	15	3	150221	Simulation of 3-D Hydraulic Fracture Propagation and Interactions Near a Wellbore	C. Armando Duarte
MS727	1	7/26(Tue)	11:45	12:00	320	15	4	151255	Modeling of Layered Rock Deformation with Filled Sand Particles by the Numerical Manifold Method	Youjun Ning
MS727	1	7/26(Tue)	12:00	12:15	320	15	5	152010	Fracture mechanics analysis in plate structures employing meshfree Mindlin-Reissener formulation	Satoyuki Tanaka

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MS727	1	7/26(Tue)	12:15	12:30	320	15	6	150294	Improved XFEM for dynamics crack propagation	Longfei Wen
MS728	1	7/25(Mon)	11:00	11:30	320	30	1	151548	Stabilized Hybrid Discontinuous Galerkin Methods for Oseen Equations	Dong-wook Shin
MS728	1	7/25(Mon)	11:30	11:45	320	15	2	151763	Hybrid Discontinuous Galerkin Methods: A Posteriori Analysis	Eun-Jae Park
MS728	1	7/25(Mon)	11:45	12:00	320	15	3	151559	Guaranteed error control for a staggered discontinuous Galerkin method	Lina Zhao
MS728	1	7/25(Mon)	12:00	12:15	320	15	4	152285	High-order DG method with Lagrange multiplier for systems of conservation laws	Jaemin Shin
MS728	1	7/25(Mon)	12:15	12:30	320	15	5	151480	Numerical Algorithm for Delta Hedging of European Options by Mixed Finite Element Method	YongHoon Kwon
MS728	2	7/26(Tue)	15:30	15:45	320	15	1	151008	Three dimensional hierarchical mixed element approximations	Philippe Remy Bernard Devloo
MS728	2	7/26(Tue)	15:45	16:00	320	15	2	152376	Compatible-Strain Mixed Finite Element Methods for 2D Compressible Nonlinear Elasticity	Arash Yavari
MS728	2	7/26(Tue)	16:00	16:15	320	15	3	150875	HIGH-PRECISION 8-NODE HYBRID DISPLACEMENT FUNCTION ELEMENTS FOR ANALYSES OF MINDLIN-REISSNER PLATE	Yi Bao
MS729	1	7/26(Tue)	17:15	17:45	320	30	1	152047	ExactPack: An Open-Source Software Package for Code Verification	Scott W Doebling
MS729	1	7/26(Tue)	17:45	18:00	320	15	2	152139	Code Verification in the Presence of Shocks and Other Discontinuities	Charles Nathan Woods
MS729	1	7/26(Tue)	18:00	18:15	320	15	3	151636	Weak Formulation of Method of Nearby Problems for Nonlinear Solid Mechanics	Takahiro Yamada
MS729	1	7/26(Tue)	18:15	18:30	320	15	4	151721	Verification Procedure Based on the Method of Nearby Problems for Finite Element Analysis of Stokes Flow	Shugo Ohta
MS729	1	7/26(Tue)	18:30	18:45	320	15	5	151775	On spurious velocities in computations of interface flows using fictitious domain method	Bhanu Teja
MS730	1	7/27(Wed)	11:00	11:30	320	30	1	150140	Semi-Analytical Meshless Method for Sandwich FGM Cylindrical Shells	Chih-Ping Wu
MS730	1	7/27(Wed)	11:30	11:45	320	15	2	150488	A 3D Selective S-FEM Model with Rebar Elements for Nonlinear Large Deformation Analysis of Cord-Reinforced Rubber Composites	Xue Yan
MS730	1	7/27(Wed)	11:45	12:00	320	15	3	151722	Numerical Study about Ground Effect of a Rotor in Hover Using Unstructured Mixed Meshes	Je Young Hwang
MS730	1	7/27(Wed)	12:00	12:15	320	15	4	150719	An arbitrary solid boundary with ghost particles incorporated in coupled FE-SPH model for FSI problems	Ting Long
MS733	1	7/25(Mon)	17:15	17:45	320	30	1	152091	Methods and Tools for Crowdsourcing-Based Global Indoor Positioning Systems	Dongsoo Han
MS733	1	7/25(Mon)	17:45	18:00	320	15	2	151018	Development of An Aircraft Noise Estimation System Using Virtual Reality Technology Based On Geometrical Acoustics	Anri Ishida
MS733	1	7/25(Mon)	18:00	18:15	320	15	3	150373	PSE System for Automatic Selection of Seedlings in a Plant Factory	Yasuhiko Manabe
MS733	1	7/25(Mon)	18:15	18:30	320	15	4	150138	Possibility of CHILO - proposal of future educational style , 2nd stage -	Shinji Hioki
MS733	1	7/25(Mon)	18:30	18:45	320	15	5	151138	Development of the Programming Contest Competition Section "Reach a Zenith of Stone Paving" in Nagano, Japan	Takayuki Teramoto
MS733	2	7/26(Tue)	11:00	11:30	315	30	1	150507	Effective Problem Solving Environment for Monte-Carlo Simulation based on HTCaaS	Seoyoung Kim
MS733	2	7/26(Tue)	11:30	11:45	315	15	2	151020	Development of the Visualization System for Environmental Flow Problem based on Markerless Augmented Reality Technology	Daisuke Sugeta
MS734	1	7/26(Tue)	11:00	11:30	GBR5	30	1	151925	Stability Analysis of u-p Reproducing Kernel Formulation for Saturated Porous Media	Sheng-Wei Chi

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MS734	1	7/26(Tue)	11:30	11:45	GBR5	15	2	151043	A New Reproducing Kernel Formulation with Embedded Kernel and Rank Stabilities for Modeling Extreme Events	J. S. Chen
MS734	1	7/26(Tue)	11:45	12:00	GBR5	15	3	150865	Radial Basis Collocation Method for Incremental-Iterative Analysis	Judy P Yang
MS734	1	7/26(Tue)	12:00	12:15	GBR5	15	4	150529	Analysis of Three-Dimensional Problems of Granular Flow and Geomechanics by Material Point Method	Zdzislaw Wieckowski
MS734	1	7/26(Tue)	12:15	12:30	GBR5	15	5	150132	Buckling analysis of functionally graded thin plate with in-plane material inhomogeneity	Lihua Wang
MS734	2	7/26(Tue)	15:30	16:00	GBR5	30	1	152052	A model for the transport of miscible fluids in the presence of anomalous diffusion	John T. Foster
MS734	2	7/26(Tue)	16:00	16:15	GBR5	15	2	150639	Particle Difference Method for Modeling the Solidification Process via the Multi-phase Field Model	Tae-Yeon Kim
MS734	2	7/26(Tue)	16:15	16:30	GBR5	15	3	151044	RKPM with Quasi-linear Approximation for Fragment-Impact Modeling	Edouard Yreux
MS734	2	7/26(Tue)	16:30	16:45	GBR5	15	4	150444	Accelerated Meshfree Methods Using Variationally Consistent Naturally Stabilized Nodal Integration	Michael C Hillman
MS734	2	7/26(Tue)	16:45	17:00	GBR5	15	5	150958	Application of a local RBF collocation method to modelling of rate-dependent plasticity	Boštjan Mavrič
MS734	3	7/25(Mon)	11:00	11:15	318A	15	1	150295	Meshless Shepard and Partition of Unity (MSPU) method based on symbol function for the simulation of crack growth	Lin Han
MS734	3	7/25(Mon)	11:15	11:30	318A	15	2	151607	Generalized consistent element-free Galerkin method	Wang Bingbing
MS734	3	7/25(Mon)	11:30	11:45	318A	15	3	151187	SPH-modeling of fast impacts with adhesion	Paul Profizi
MS735	1	7/26(Tue)	17:15	17:30	GBR5	15	1	150955	Reduction of Simulation Cost and Expression of Arbitrary Smooth Wall Boundaries for the MPS Method	kazuya shibata
MS735	1	7/26(Tue)	17:30	17:45	GBR5	15	2	150951	Mirror Particle Boundary Representation for MPS Simulation	Takuya Matsunaga
MS735	1	7/26(Tue)	17:45	18:00	GBR5	15	3	150441	A mathematical interpretation for spatial differential operators in Moving Particle Simulation	motofumi HATTORI
MS735	1	7/26(Tue)	18:00	18:15	GBR5	15	4	150728	Angular Momentum Conservation in a Particle Method with Implicit Viscosity Calculation	Masahiro Kondo
MS735	1	7/26(Tue)	18:15	18:30	GBR5	15	5	150796	Research and improvement on the Discontinuous Smoothed Particle Hydrodynamics (DSPH) method	Fei Xu
MS735	1	7/26(Tue)	18:30	18:45	GBR5	15	6	151644	Enforcement of essential boundary conditions in consistent element-free Galerkin methods	Gao Xin
MS735	2	7/27(Wed)	15:30	15:45	318BC	15	1	150843	Elastic-plastic smoothed particle hydrodynamics method for fluid-structure interaction analysis –multi-linear constitutive equation-	Seiya Hagihara
MS735	2	7/27(Wed)	15:45	16:00	318BC	15	2	151671	Multi-Level Tsunami Disaster Simulation with a Matrix Array Shaped Virtual Wave Making Plate by using the Particle Method	Nur' Ain Idris
MS735	2	7/27(Wed)	16:00	16:15	318BC	15	3	150948	Moving Particle Simulation and Real Machine Validation of Trajectory Planning to Transport Liquid Container for Robot	Akihiro Sekine
MS735	2	7/27(Wed)	16:15	16:30	318BC	15	4	152382	3-Dimensional WMLS-based Particle Simulation of Wave Run-up over a Semi-submersible Offshore Platform	Sang-Moon Yun
MS735	2	7/27(Wed)	16:30	16:45	318BC	15	5	150731	Meshless large plastic deformation analysis by triple-reciprocity boundary element method	Yoshihiro OCHIAI
MS735	2	7/27(Wed)	16:45	17:00	318BC	15	6	150133	Numerical Solutions of Groundwater Flow in Layered Soil Using the Method of Fundamental Solutions	Cheng-yu Ku
MS737	1	7/27(Wed)	17:15	17:45	318BC	30	1	151240	Image-based calculation of magnetic properties of NdFeB hard magnet based on the phase-field method and micromagnetics simulation	Toshiyuki Koyama
MS737	1	7/27(Wed)	17:45	18:00	318BC	15	2	151194	3D Phase-Field Simulation of Li-ion Diffusion and Stress Evolution in LiCoO ₂ Electrode of Li-ion battery	Chisa TSUYUKI

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MS737	1	7/27(Wed)	18:00	18:15	318BC	15	3	151060	Accuracy Improvement of Multi-Phase-Field Simulations on 2D and 3D Anisotropic Grain Growth	Eisuke Miyoshi
MS737	1	7/27(Wed)	18:15	18:30	318BC	15	4	150987	Accuracy Evaluations of Phase-Field Crack Models with Double- and Single-Well Potentials	Shuhei Okunishi
MS737	1	7/27(Wed)	18:30	18:45	318BC	15	5	150359	Phase-field models for the dynamic evolution of shapes in membranes	Aurora Hernandez-Machado
MS737	2	7/25(Mon)	17:15	17:30	318A	15	1	151062	Parallel-GPU Computations of Free Growth of Settling Dendrite by Phase-field Lattice Boltzmann Method	Shinji Sakane
MS737	2	7/25(Mon)	17:30	17:45	318A	15	2	151098	Multi-phase-field Modeling for Multiphase Flow based on Conserved Allen-Cahn Equation	Shintaro Aihara
MS737	2	7/25(Mon)	17:45	18:00	318A	15	3	151525	Data Assimilation of Phase-field Simulation Using Ensemble Kalman Filter: Parameter Estimation from Experimental Data	Kengo Sasaki
MS737	2	7/25(Mon)	18:00	18:15	318A	15	4	151175	Multi-Phase-Field Simulation of Cyclic Phase Transformation in Fe-C-Mn-Si Quaternary Alloy	Masahito Segawa
MS737	2	7/25(Mon)	18:15	18:30	318A	15	5	151084	Multi-Phase-Field Topology Optimization Model for Multimaterials Problem	Tomohiro Takaki
MS737	2	7/25(Mon)	18:30	18:45	318A	15	6	151825	Phase-Field Modeling for Dendritic Solidification in Freeze-Casting Process	Tzu-Hsuan Huang
MS738	1	7/27(Wed)	17:15	17:30	320	15	1	152305	A Reconstructed Discontinuous Galerkin method for Compressible Multi-phase flows in Arbitrary Lagrangian-Eulerian Formulation	Hong Luo
MS738	1	7/27(Wed)	17:30	17:45	320	15	2	152159	A Riemann-solver-free Spacetime Discontinuous Galerkin Method for General Conservation Laws	Shuang Zhang Tu
MS738	1	7/27(Wed)	17:45	18:00	320	15	3	150503	High order sub-cell finite volume schemes for solving Navier-Stokes equations on two-dimensional unstructured grids	Pan Jianhua
MS738	1	7/27(Wed)	18:00	18:15	320	15	4	151450	Construction of higher order generalized finite difference methods with unstructured meshes for 2D inviscid compressible flows	Xue-li Li
MS738	1	7/27(Wed)	18:15	18:30	320	15	5	152145	An Efficient High-Order Incompressible Flow Simulation on Unstructured Meshes	Euntaek LEE
MS738	1	7/27(Wed)	18:30	18:45	320	15	6	150261	Compact high-order finite volume method for the compressible Navier- Stokes equations on unstructured grids	Qian Wang
MS739	1	7/28(Thu)	11:00	11:30	318BC	30	1	151215	Model order reduction of initial value problems	Elias Cueto
MS739	1	7/28(Thu)	11:30	11:45	318BC	15	2	152209	A POD-EIM model reduction for a nonlinear thermal problem	Fabien Casenave
MS739	1	7/28(Thu)	11:45	12:00	318BC	15	3	152113	Generalized parametric flow solutions integrating geometry with computer-aided design	Antonio Huerta
MS739	1	7/28(Thu)	12:00	12:15	318BC	15	4	150968	Data-driven modeling of heterogeneous materials: self-consistent homogenization for elasto-plastic behavior	Zeliang Liu
MS739	1	7/28(Thu)	12:15	12:30	318BC	15	5	150236	A Minimal Subspace Rotation approach for obtaining stable and accurate low-order projection-based reduced order models for nonlinear compressible flow	Irina Tezaur
MS739	2	7/26(Tue)	11:00	11:30	318A	30	1	151156	Cross Approximations for a Priori Reduction of Nonlinear Parameterized Models	Jose V. Aguado
MS739	2	7/26(Tue)	11:30	11:45	318A	15	2	150832	POD-based "virtual charts" for parametric studies: application to welding processes	YE LU
MS739	2	7/26(Tue)	11:45	12:00	318A	15	3	150589	Approximated Lax Pairs and Empirical Interpolation for Nonlinear Evolution Equations	Jean-Frédéric Gerbeau
MS739	2	7/26(Tue)	12:00	12:15	318A	15	4	150586	Low-cost PGD-reduced models in nonlinear solid mechanics including cyclic loadings	Pierre LADEVEZE
MS739	2	7/26(Tue)	12:15	12:30	318A	15	5	150310	Efficient Model Order Reduction of Problems with Material Nonlinearities Using a Localized Discrete Empirical Interpolation Method	Fariborz Ghavamian
MS740	1	7/27(Wed)	11:00	11:30	GBR5	30	1	150423	Automatic Numerical Simulation from Geometric Models in the Scaled Boundary Finite Element Framework	Chongmin Song

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS740	1	7/27(Wed)	11:30	11:45	GBR5	15	2	151557	Quadratic serendipity finite elements over arbitrary polytopes	Sinu Arikkuzhi
MS740	1	7/27(Wed)	11:45	12:00	GBR5	15	3	150426	A Stochastic Scaled Boundary Finite Element Method	Xiangyun Long
MS740	1	7/27(Wed)	12:00	12:15	GBR5	15	4	150431	Application of SBFEM into viscoelastic problems	Yiqian He
MS740	1	7/27(Wed)	12:15	12:30	GBR5	15	5	150247	Image-Based Elasto-Plastic Analysis by Scaled Boundary Polytope Elements	KE HE
MS740	2	7/28(Thu)	15:30	16:00	318BC	30	1	151037	Exterior Structural-acoustic Modeling using the Scaled Boundary Finite Element Method	Carolín Birk
MS740	2	7/28(Thu)	16:00	16:15	318BC	15	2	151630	Dynamic crack propagation of the soil-structure interaction system using the scaled boundary finite element method	Denghong Chen
MS740	2	7/28(Thu)	16:15	16:30	318BC	15	3	151106	Automatic Polyhedral Mesh Generation with Applications to the Scaled Boundary Finite-Element Method	Yan Liu
MS740	2	7/28(Thu)	16:30	16:45	318BC	15	4	152210	Simulation and modeling of curved structures by means of SBFEM based on a curved scaling direction	Fabian Krome
MS740	2	7/28(Thu)	16:45	17:00	318BC	15	5	151030	Decupled SBFEM as a macro element for FE analysis	Mohammad Iman Khodakarami
MS740	3	7/26(Tue)	15:30	15:45	318A	15	1	151080	Scaled Boundary Polygons for high-frequency elastodynamics	Hauke Gravenkamp
MS740	3	7/26(Tue)	15:45	16:00	318A	15	2	151733	Automatic and efficient image-based analysis using octree mesh and scaled boundary polytope elements	Albert Artha Saputra
MS741	1	7/26(Tue)	16:00	16:15	318A	15	3	150887	Inf-sup stable low-order mixed finite elements for Biot-type coupled fluid flow at finite deformations	Christian Linder
MS741	1	7/26(Tue)	16:15	16:30	318A	15	4	150965	A General Purpose User Element Subroutine to Compute Dispersion Relations in Periodic Materials with Existing Finite Element Codes	Camilo Valencia
MS741	1	7/26(Tue)	16:30	16:45	318A	15	5	151855	A 3D Cosserat point element for modeling nonlinear orthotropic elastic materials	Eli Mtanes
MS742	1	7/29(Fri)	8:30	8:45	320	15	1	151634	Symplectic superposition method with applications to bending and vibration of rectangular plates as well as stretchable electronics	Rui Li
MS742	1	7/29(Fri)	8:45	9:00	320	15	2	150445	Numerical Method for the Linear Second-order Integro-differential Equations in Analytic Mechanics	Zheng Yao
MS742	1	7/29(Fri)	9:00	9:15	320	15	3	150461	A symplectic approach for free vibration of nanoplates based on nonlocal theory	Zhenhuan Zhou
MS742	1	7/29(Fri)	9:15	9:30	320	15	4	150509	Steady state forced vibration analysis of rectangular Reissner plates using a symplectic analytical wave based method	Xianbo Sun
MS742	1	7/29(Fri)	9:30	9:45	320	15	5	150625	Mode III fracture analysis for the piezoelectric materials by finite element discretized symplectic method.	Chenghui Xu
MS742	1	7/29(Fri)	9:45	10:00	320	15	6	150391	Symplectic analytical singularity element and its application in fracture mechanics	Peng Zhang
MS744	1	7/29(Fri)	8:30	9:00	318BC	30	1	150207	Scaling DOFs in Hexahedral Meshes to Enable Affordable Solution Verification	Matthew Staten
MS744	1	7/29(Fri)	9:00	9:15	318BC	15	2	151205	Sculpt: Parallel Grid-based Hex Meshing from Volume Fractions	Steven J Owen
MS744	1	7/29(Fri)	9:15	9:30	318BC	15	3	150452	Hexahedral Meshing Based on Optimized Swept Volume Decomposition	Haiyan Wu
MS744	1	7/29(Fri)	9:30	9:45	318BC	15	4	150984	A Parallel Log-Barrier Mesh Warping Algorithm Based on Sparse Linear Solvers for Systems with Multiple Right-Hand Sides	Suzanne Michelle Shontz
MS744	2	7/28(Thu)	15:30	15:45	320	15	1	151942	P2 anisotropic adaptive meshing: a direct abstract framework	thierry coupez
MS744	2	7/28(Thu)	15:45	16:00	320	15	2	151725	Fine grain multi threaded mesh generation	Jean-Francois Remacle

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS744	2	7/28(Thu)	16:00	16:15	320	15	3	151112	Shell Transformation, a New Flip for Tetrahedral Meshes and Its Applications	JIANJUN CHEN
MS744	2	7/28(Thu)	16:15	16:30	320	15	4	150270	Supporting the Unstructured Mesh Needs of Parallel Fusion Simulations Including Coupling to Particle in Cell Methods	Seegyong Seol
MS745	1	7/25(Mon)	11:00	11:15	321	15	1	150477	Reduced Order Modeling of Electromagnetic Metal Forming for the Identification of a Flow Stress Model	Kyunghoon Lee
MS745	1	7/25(Mon)	11:15	11:30	321	15	2	150828	Linear model enriched with hyper-reduction for a simplified prediction of residual stress in welding	Tuan DINH TRONG
MS745	1	7/25(Mon)	11:30	11:45	321	15	3	150902	A general method of reduced order modeling for a system with material and geometric nonlinearities	Euiyoung Kim
MS745	1	7/25(Mon)	11:45	12:00	321	15	4	151640	Vibration Analysis of a Base Frame Structure for a Large Centrifugal Compressor System Using Krylov Subspace Model Order Reduction	Jeong Sam Han

■ Mini-Symposium Schedule

- Optimization and Inverse Problems (MS801~MS899)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS801	1	7/26(Tue)	17:15	17:45	318A	30	1	151961	Scalable Methods Based on Taylor Approximations and Randomized Algorithms for High-Dimensional Bayesian Inverse Problems Governed by PDEs	Omar Ghattas
MS801	1	7/26(Tue)	17:45	18:00	318A	15	2	152029	Multilevel Markov Chain Monte Carlo method for Bayesian inverse problems	Viet Ha Hoang
MS801	1	7/26(Tue)	18:00	18:15	318A	15	3	151835	Joint Inversion of Density-driven Flow and Tracer Transport Data for Characterizing a Managed Aquifer Recharge and Recovery Site	Seunghak Lee
MS801	1	7/26(Tue)	18:15	18:30	318A	15	4	151802	Multilevel sequential Monte Carlo sampler	Kody Law
MS801	1	7/26(Tue)	18:30	18:45	318A	15	5	151100	A partial domain inversion approach for large-scale Bayesian inverse problems in high dimensional parameter spaces	Tan Bui-Thanh
MS801	2	7/27(Wed)	11:00	11:15	318A	15	1	151427	An adjoint-based search method for an ignition threshold	Jesse Capecelatro
MS801	2	7/27(Wed)	11:15	11:30	318A	15	2	152040	MCX: A multicomplex Finite Element Library for high order derivatives	Manuel J Garcia
MS801	2	7/27(Wed)	11:30	11:45	318A	15	3	152420	Optimization for Composite Square Beam	Lili Tong
MS801	2	7/27(Wed)	11:45	12:00	318A	15	4	151500	Simultaneous estimation method of viscosity and dislocation in a viscoelastic material using high-fidelity model aimed for application to subduction zone earthquake	Ryoichiro Agata
MS801	2	7/27(Wed)	12:00	12:15	318A	15	5	151295	Numerical Model For Identification Of Internal Defect Or Inclusion Based On Extended Finite Element Methods	Wenhu Zhao
MS802	1	7/25(Mon)	11:00	11:30	327BC	30	1	150704	Multi-Scale Topology Optimization for Integrated Design of Functionally Graded Composites and Metamaterials	ZHEN LUO
MS802	1	7/25(Mon)	11:30	11:45	327BC	15	2	150512	A TIME VARIANT RELIABILITY ANALYSIS METHOD BASED ON STOCHASTIC PROCESS DISCRETIZATION	Chao Jiang
MS802	1	7/25(Mon)	11:45	12:00	327BC	15	3	152409	Evolutionary Structural Optimization-25 years of Continuous Development	Grant Steven
MS802	1	7/25(Mon)	12:00	12:15	327BC	15	4	151750	An h-adaptive strategy based on sensitivity analysis to solve structural shape optimization problems	Juan José Ródenas
MS802	1	7/25(Mon)	12:15	12:30	327BC	15	5	151094	Shape optimization of energy storage flywheel rotor	Jiang Lu
MS802	2	7/25(Mon)	15:30	16:00	327BC	30	1	151152	Estimation of upper bound of the dispersive effect in the homogenized wave equation utilizing shape optimization method	Takayuki Yamada
MS802	2	7/25(Mon)	16:00	16:15	327BC	15	2	151819	Dynamic simulation data mining based optimization approach for efficient design optimization	Yanli Shao
MS802	2	7/25(Mon)	16:15	16:30	327BC	15	3	151724	A Probability and Interval Reliability Analysis Method for Structures Considering Correlation	Jing Zheng
MS802	2	7/25(Mon)	16:30	16:45	327BC	15	4	150395	A novel method for topological shape optimization of microstructures of isotropic cellular materials	Jie Gao
MS802	2	7/25(Mon)	16:45	17:00	327BC	15	5	150105	Buckling Analysis and Mechanical Optimisation of Thin-Walled Shells under Pure Bending and Internal Pressure	Valerio Polenta
MS802	3	7/27(Wed)	15:30	16:00	318A	30	1	152066	Topology optimization with minimum distance constraints of multiple embedded components by level set method	Zhan Kang
MS802	3	7/27(Wed)	16:00	16:15	318A	15	2	151700	Integrated Design of Structure and Its Materials Using the Level Set-based Method	Hao Li
MS802	3	7/27(Wed)	16:15	16:30	318A	15	3	152425	Reliability-based design optimization of mid-frequency response for the built-up systems with epistemic uncertainties	Shengwen Yin

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS802	3	7/27(Wed)	16:30	16:45	318A	15	4	151765	Topology optimization based method for design of additive manufacturing structures	Quhao Li
MS802	3	7/27(Wed)	16:45	17:00	318A	15	5	151066	Structural Optimization of Plate and Shell under Thermo-mechanical Load	Hengyang Li
MS803	1	7/25(Mon)	15:30	15:45	321	15	1	151441	Large-scale multidisciplinary design optimization using a software framework	John Tae Hyeon Hwang
MS803	1	7/25(Mon)	15:45	16:00	321	15	2	152241	Automatized gearbox architecture designs exploration by graph exhaustive generation	Steven Masfaraud
MS803	1	7/25(Mon)	16:00	16:15	321	15	3	151050	Design Optimization of Active Multi-Material 3D Printed Rod Structures	Oliver Weeger
MS803	1	7/25(Mon)	16:15	16:30	321	15	4	150152	Modular Platform Optimization in Conceptual Vehicle Body Design by Using a Modified Collaborative Optimization Method and a Dynamic Weight Factor Method	Chunlai Shan
MS803	1	7/25(Mon)	16:30	16:45	321	15	5	151002	Robust Quasi-Newton Methods for Partitioned FSI Simulations	Klaudius Scheufele
MS804	1	7/25(Mon)	17:15	17:30	321	15	1	150287	Shape identification of arc-like perfectly conducting cracks in limited-view inverse scattering problem	Won-Kwang Park
MS804	1	7/25(Mon)	17:30	17:45	321	15	2	150831	Decoupling Elastic Waves and Its Applications	Hongyu Liu
MS804	1	7/25(Mon)	17:45	18:00	321	15	3	151140	A Mathematical Model for Reconstructing 3D Left Ventricle Shape Using 2D Echocardiography Data	Chi Young Ahn
MS804	1	7/25(Mon)	18:00	18:15	321	15	4	150977	Particle filter for detection of damage in composite laminates using XFEM	Gang Yan
MS804	1	7/25(Mon)	18:15	18:30	321	15	5	150627	A direct estimate of horizontal spatial covariance from non-orthogonally sampled surface velocities	Sung Yong Kim
MS804	1	7/25(Mon)	18:30	18:45	321	15	6	151172	Hybrid numerical scheme for plasmonic nanospheres composites	Sanghyeon Yu
MS805	1	7/26(Tue)	11:00	11:15	321	15	1	151977	Vibration-based Damage Identification using the Multi-Particle Collision Algorithm with Hooke-Jeeves coupled with NASTRAN	Reynier Hernández Torres
MS805	1	7/26(Tue)	11:15	11:30	321	15	2	151952	On Development of New Acceleration Techniques for Dedicated Evolutionary Algorithms Applied to Chosen Large Problems of Mechanics	Maciej Glowacki
MS805	1	7/26(Tue)	11:30	11:45	321	15	3	151620	Study on Micro-tomography of Temperature using FEM-based Inverse Analysis applied to Optical Coherence Straingraphy	Ryuki Kunimoto
MS805	1	7/26(Tue)	11:45	12:00	321	15	4	151336	Identification of Paint Resistance and Deposition Model Parameters for Electrodeposition Coating Simulation	Ayaka Shimura
MS805	1	7/26(Tue)	12:00	12:15	321	15	5	150208	Identification of material parameters using indentation test and manifold learning approach	Liang MENG
MS806	1	7/27(Wed)	15:30	16:00	GBR5	30	1	151359	Microstructure optimal design of periodic heterogeneous beam for extreme or specified effective stiffness	Gengdong Cheng
MS806	1	7/27(Wed)	16:00	16:15	GBR5	15	2	150992	A Microstructural Optimization Method Based on Micropolar Continuum Theory	Ayami Sato
MS806	1	7/27(Wed)	16:15	16:30	GBR5	15	3	150885	Systematic design of finite-deformation 3D auxetic materials	Fengwen Wang
MS806	1	7/27(Wed)	16:30	16:45	GBR5	15	4	150709	CONCURRENT MULTI-SCALE OPTIMIZATION DESIGN OF COMPOSITE FRAME STRUCTURES WITH MAXIMIZING FUNDAMENTAL FREQUENCY	Zunyi Yi Duan
MS806	1	7/27(Wed)	16:45	17:00	GBR5	15	5	150437	A TWO-STEP OPTIMIZATION SCHEME FOR GLOBAL OPTIMIZATION DESIGN OF COMPOSITE LAMINATED FRAME STRUCTURE	Jun Yan
MS806	2	7/27(Wed)	17:15	17:45	GBR5	30	1	151113	Two-scale topology optimization for composite plates with thermal deformation	Kenjiro Terada
MS806	2	7/27(Wed)	17:45	18:00	GBR5	15	2	151635	Lagrangian description based topology optimization via Moving Morphable Components (MMC) approach	Weisheng Zhang
MS806	2	7/27(Wed)	18:00	18:15	GBR5	15	3	151632	Minimum Length Scale Control in Structural Topology Optimization Based on Moving Morphable Components (MMCs) Approach	Dong Li

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS806	2	7/27(Wed)	18:15	18:30	GBR5	15	4	151599	Explicit Structural Topology Optimization via Moving Morphable Voids (MMV) Approach	Wanying Yang
MS806	2	7/27(Wed)	18:30	18:45	GBR5	15	5	150378	Explicit Topology Optimization using Spline-Based Meshfree Method	Junyoung Hur
MS806	3	7/28(Thu)	11:00	11:15	GBR5	15	1	151262	Three-dimensional Boundary Tracking Type Level-set Topology Optimization	Shintaro Yamasaki
MS806	3	7/28(Thu)	11:15	11:30	GBR5	15	2	150921	Free-form surface reinforcement using a moving morphable component method	Baojun Li
MS806	3	7/28(Thu)	11:30	11:45	GBR5	15	3	151475	Experiences of Software Development for Topology Optimization	David Weinberg
MS806	3	7/28(Thu)	11:45	12:00	GBR5	15	4	150756	Higher-Order Beam-Based Ground Topology Optimization for Thin-Walled Box Beam Structures	Soomin Choi
MS806	3	7/28(Thu)	12:00	12:15	GBR5	15	5	152309	Novel methods for stochastic topological sensitivity analysis	Xuchun Ren
MS806	3	7/28(Thu)	12:15	12:30	GBR5	15	6	152169	Topology Optimization Method for Adaptation of Existing Structures to New Requirements, Thru Addition of Framework Structures	Saad Hafsa
MS806	4	7/25(Mon)	17:15	17:45	327BC	30	1	150203	Simultaneous topology optimization of compliant mechanism and its support through a level set based multiple-type boundary method	Qi Xia
MS806	4	7/25(Mon)	17:45	18:00	327BC	15	2	152116	Performance-based Topology Optimization without the Volume Constraint	Chang-Wei Huang
MS806	4	7/25(Mon)	18:00	18:15	327BC	15	3	151833	Topology Optimization Considering Finite Elastoplastic Deformation	Hiroya Hoshiba
MS806	4	7/25(Mon)	18:15	18:30	327BC	15	4	151623	Topology Optimization for Uniform Thickness Members	Van-Nam Hoang
MS806	4	7/25(Mon)	18:30	18:45	327BC	15	5	152260	Design optimization and finite element analysis of surgical plates for maxillofacial reconstruction surgery	Si-Myung Park
MS806	5	7/26(Tue)	11:00	11:30	327BC	30	1	152072	Various failure constraints of stress-based topology optimization method for fluid-structure interaction	Gil Ho Yoon
MS806	5	7/26(Tue)	11:30	11:45	327BC	15	2	152201	Topology and Shape Optimization of Sheet Metals with integrated Deep-Drawing-Simulation	Robert Dienemann
MS806	5	7/26(Tue)	11:45	12:00	327BC	15	3	152192	Torque Ripple Reduction Design of Permanent Magnet Motor Using Hybrid Analysis Method	Sunghoon Lim
MS806	5	7/26(Tue)	12:00	12:15	327BC	15	4	150375	Two-material topology optimization for maximizing creep dissipation energy	Kyeong-Soo Yun
MS806	5	7/26(Tue)	12:15	12:30	327BC	15	5	150991	Topology optimization of a No-Moving-Part valve based on a multiobjective formulation	Yuki Sato
MS806	6	7/28(Thu)	15:30	15:45	318A	15	1	151778	A topology optimisation of photonic crystals with the Sakurai-Sugiura method and a fast direct BEM	MIZUKI KAMAHORI
MS806	6	7/28(Thu)	15:45	16:00	318A	15	2	151628	Topology optimization of acoustic lens set with multi materials	Quang Dat Tran
MS806	6	7/28(Thu)	16:00	16:15	318A	15	3	151099	Level set-based topology optimization of three dimensional wave-motion-converting metasurface in an acoustic-elastic coupled system	Yuki Noguchi
MS806	6	7/28(Thu)	16:15	16:30	318A	15	4	151070	Topology Optimization of Heat Conduction Considering Phonon Dynamics at the Nano Scale	Kozo Furuta
MS806	6	7/28(Thu)	16:30	16:45	318A	15	5	150819	Topology Optimization of Anisotropic Metamaterials	Xiong Wei Yang
MS806	6	7/28(Thu)	16:45	17:00	318A	15	6	150449	Reflector design for RF stealth effect using the phase field design method	Namjoon Heo
MS807	1	7/29(Fri)	8:30	8:45	321	15	1	151372	Simultaneous Buckling Design of Stiffened Shells with Multiple Cutouts	Peng Hao
MS807	1	7/29(Fri)	8:45	9:00	321	15	2	150716	A multi-model approach for multi-criteria optimization including crash and NVH responses	Ming Zhou

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS807	1	7/29(Fri)	9:00	9:15	321	15	3	150471	Large Scale Structural Optimization using GENESIS®, ANSYS® and the Equivalent Static Load Method	Juan Pablo Leiva
MS807	1	7/29(Fri)	9:15	9:30	321	15	4	150633	Quasi-Static Structural Optimization of an Automobile Roof Structure using the Enforced Displacement Method: A Preliminary Study	Wook-han Choi
MS807	1	7/29(Fri)	9:30	9:45	321	15	5	150671	Topology optimization of a high-acceleration and low-load mechanism	Chao-Ran Chen
MS808	1	7/26(Tue)	17:15	17:30	321	15	1	151780	A Probabilistic Gradient-based Transformation Method with Ensemble of Gaussian-based Reliability Analyses (PGTM/EoGRA)	Po Ting Lin
MS808	1	7/26(Tue)	17:30	17:45	321	15	2	150748	Trade-off Analysis of Balloon-Borne VLBI Reflector Through Multiobjective Optimization Considering Uncertainty	Nozomu KOGISO
MS808	1	7/26(Tue)	17:45	18:00	321	15	3	151703	Investigation and Comparison of Various Types of Ensemble of Kernel Reliability Analyses (EKRA) of Design Optimization with Arbitrarily Distributed Uncertainties	Shu-Ping Lin
MS808	1	7/26(Tue)	18:00	18:15	321	15	4	151859	Probabilistic Considerations in Contrast Enhancement	Wei-Hao Lu
MS808	1	7/26(Tue)	18:15	18:30	321	15	5	150486	Uncertainty-based Multidisciplinary Design Optimization using Multiplicative Decomposition Method	Shinyu Kim
MS810	1	7/27(Wed)	11:00	11:15	321	15	1	151387	Integrated Layout of Actuators and Structural Topology Optimization Design of Piezoelectric Smart Structures for Static Shape Control	kaike yang
MS810	1	7/27(Wed)	11:15	11:30	321	15	2	151477	On the optimal design of the graded metal honeycomb heat exchanger considering the 3D temperature field of cooling fluid	Yongcun Zhang
MS810	1	7/27(Wed)	11:30	11:45	321	15	3	150852	Multi-objective Optimization of Damped Composite Structures with Frequency-dependent Viscoelastic Material Layers	Chao Xu
MS810	1	7/27(Wed)	11:45	12:00	321	15	4	151384	Topology Optimization with Shape Preserving Design	Yu LI
MS810	1	7/27(Wed)	12:00	12:15	321	15	5	152177	Topology Optimization of a Passenger Car Door Made of Fiber-Reinforced Composite Laminates	CHEOL KIM
MS811	1	7/29(Fri)	8:30	9:00	318A	30	1	150464	Level-Set Topology Optimization for Additive Manufacturing	H Alicia Kim
MS811	1	7/29(Fri)	9:00	9:15	318A	15	2	150873	Worst-Case Topology Optimization for Uncertain Material Parameters in Additive Manufacturing	Jannis Greifenstein
MS811	1	7/29(Fri)	9:15	9:30	318A	15	3	151057	Multi-scale topology optimization for polycrystalline metals applying a multi-phase-field method	Junji Kato
MS811	1	7/29(Fri)	9:30	9:45	318A	15	4	151705	Estimating Fluid Permeability-Porosity Bounds Using Topology Optimization	Seung-Hyun Ha
MS811	1	7/29(Fri)	9:45	10:00	318A	15	5	151426	Porous composite with negative thermal expansion obtained by multi-material topology optimization and additive manufacturing	Akihiro Takezawa
MS811	2	7/27(Wed)	15:30	15:45	321	15	1	150237	Multi-Objective Topology Optimization for SLS/SLM: Minimizing Thermal Effects during Build Process while Maximizing In-Field Structural and Thermal Performance	Andrew T Gaynor
MS811	2	7/27(Wed)	15:45	16:00	321	15	2	150320	Topology optimization for additive manufacturing considering cost of support	Ming Zhou
MS811	2	7/27(Wed)	16:00	16:15	321	15	3	152240	A PDE based approach to constrain the minimum overhang angle in topology optimization for additive manufacturing	Emiel van de Ven
MS812	1	7/27(Wed)	17:15	17:30	321	15	1	151938	Synthesis and Design Optimization of Nonlinear Suspension Kinematics and Dynamics	Greg Hulbert
MS812	1	7/27(Wed)	17:30	17:45	321	15	2	151657	A Simulation Framework for Bio-inspired Shape Design on Electrochemical Reaction	Kazuhiro Suga
MS812	1	7/27(Wed)	17:45	18:00	321	15	3	151804	A Fourier-related FE2 Multiscale Model for Instability Phenomena of Long Fiber Reinforced Materials	Rui Xu
MS812	1	7/27(Wed)	18:00	18:15	321	15	4	151756	System Reliability Analysis for Power Generation and Durability of Piezoelectric Energy Harvester under Inherent Variability in Material Properties and Geometry	Heonjun Yoon
MS812	1	7/27(Wed)	18:15	18:30	321	15	5	152161	Topology Optimization of Active Composites Composed of Shape Memory Alloys and Elastomeric Gels	Jorge Luis Barrera Cruz

Session	Session No.	Date	Start Time	-	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS812	1	7/27(Wed)	18:30	-	18:45	321	15	6	151843	System reliability analysis using copula estimation method	Saekyeol Kim

■ Mini-Symposium Schedule

- Various Computational Methods & Applications (MS901~MS999)

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS901	1	7/28(Thu)	11:00	11:15	321	15	1	152100	Soil-Structure Interaction Analysis in Computational Mechanics: a Retrospective Examination	Moon Kyum Kim
MS901	1	7/28(Thu)	11:15	11:30	321	15	2	151796	Multibody dynamic analysis of a new electronically controlled single cylinder diesel engine	Nanxiang Guan
MS901	1	7/28(Thu)	11:30	11:45	321	15	3	150914	Computational Modelling of Dynamics of Cables and Fibres	Pavel Polach
MS901	1	7/28(Thu)	11:45	12:00	321	15	4	151420	A Kriging based Finite Element Method for Shell Analysis	Wichain Sommanawat
MS901	1	7/28(Thu)	12:00	12:15	321	15	5	151409	The Construction of Discrete Scheme Keeping 1-D Spherical Symmetry for 2-D Transport Equations	Shulin Yang
MS902	1	7/28(Thu)	15:30	15:45	321	15	1	151246	Multi-Agents Simulation of Mixed Traffics with Cars, Trams and Pedestrians in Okayama City	Shinobu Yoshimura
MS902	1	7/28(Thu)	15:45	16:00	321	15	2	151199	Inverse Analysis of Origin-Destination Matrix for Microscopic Traffic Simulation	Kazuki Abe
MS902	1	7/28(Thu)	16:00	16:15	321	15	3	150696	Traffic Network Design Using Traffic flow Simulator	Eisuke Kita
MS902	1	7/28(Thu)	16:15	16:30	321	15	4	150891	The optimal traffic light control for highway on-ramps	Andrey Alekseenko
MS902	1	7/28(Thu)	16:30	16:45	321	15	5	152372	Study and Development of a Prosthesis Robotics Controlled with Sensor Stimulation	Patricia Mascarenhas Dias
MS902	1	7/28(Thu)	16:45	17:00	321	15	6	150677	Application of Social Network Analysis Techniques for Japanese Industrial Structure	Yi Zuo
MS904	1	7/27(Wed)	17:15	17:45	318A	30	1	152070	Multi-scale tsunami simulation for simulating bridge washout disaster by using a particle method	mitsuteru asai
MS904	1	7/27(Wed)	17:45	18:00	318A	15	2	151693	Seismic response analysis of reinforce concrete pier with concrete solid and steel beam elements	Shigenobu Okazawa
MS904	1	7/27(Wed)	18:00	18:15	318A	15	3	151637	Development of Tsunami Analysis Method for Estimation of Damage of Evacuation Building by Tsunami Impacts	Seizo Tanaka
MS904	1	7/27(Wed)	18:15	18:30	318A	15	4	151233	Tension Softening and Subsequent Unloading/Reloading Model of Cracked Concrete for FEM Using Solid Element	Takuzo Yamashita
MS904	1	7/27(Wed)	18:30	18:45	318A	15	5	152189	Integrated earthquake simulation enhanced with fast wave propagation analysis using full K computer	Kohei Fujita
MS904	2	7/26(Tue)	15:30	15:45	321	15	1	152233	Parallel and Robust Tetrahedral Mesh Generation Method for Seismic Response Analysis of Structures	Keisuke Katsushima
MS904	2	7/26(Tue)	15:45	16:00	321	15	2	152227	Crustal Deformation Analysis using Heterogeneous Computing	Takuma Yamaguchi
MS904	2	7/26(Tue)	16:00	16:15	321	15	3	150333	Multi-Agent Simulation for Prediction of Crowd Evacuation Based on Integration of Simple Algorithms Reflecting Human Behavior	Masaya Minowa
MS904	2	7/26(Tue)	16:15	16:30	321	15	4	150202	Finite Element Motion Analysis of Furniture under Seismic Excitation	Toshiki Miura
MS906	1	7/28(Thu)	15:30	16:00	GBR5	30	1	152163	Numerical Simulation Method of Gas-Liquid Two-Phase Flow for a Cavitation Bubble Collapse	Yoshiaki Tamura
MS906	1	7/28(Thu)	16:00	16:15	GBR5	15	2	151516	A Modified Method for Peridynamic Theory Based on Voronoi Diagram	Qiwen Liu
MS906	1	7/28(Thu)	16:15	16:30	GBR5	15	3	150374	Numerical Investigation of Air-Particle Interactive Turbulent Flows Through A Shrouded Sampling Probe	ILYOUP SOHN

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS906	1	7/28(Thu)	16:30	16:45	GBR5	15	4	151734	Thermal and stress analyses of a railway wheel-rail connection during intensive sliding-rolling braking	Peter Tamas Zwierczyk
MS906	1	7/28(Thu)	16:45	17:00	GBR5	15	5	152107	On a Methodology for Analytical Solution of Anisotropic Thin Plates in Linear Bending by Recursive Isotropic Solution Enhancement	Tales de Vargas Lisboa
MS906	2	7/29(Fri)	8:30	9:00	GBR5	30	1	151321	A fluid Simulation Method Based on Stated Based Peridynamic Theory	Lisheng Liu
MS906	2	7/29(Fri)	9:00	9:15	GBR5	15	2	152385	Generalized force method (GFM) and a numerical solution of the simultaneous equation	Junya Imamura
MS906	2	7/29(Fri)	9:15	9:30	GBR5	15	3	152263	A New Approach to Interpret Seismic Data Combining Numerical Analysis and Field Monitoring in Micro Seismic Monitoring	Dehong Tang
MS906	2	7/29(Fri)	9:30	9:45	GBR5	15	4	152190	Modelling Rockfall Protection System with Coupled Continuous-discontinuous Numerical Methods	Wei-Tze Chang
MS906	2	7/29(Fri)	9:45	10:00	GBR5	15	5	151993	A Shallow Water Equation Based on Displacement and The Symplectic Method	Feng Wu
MS906	3	7/26(Tue)	15:30	16:00	327BC	30	1	151144	SSFEM-based Vibration Analysis for Railway Track with Spatial Variation of Elastic Modulus of Ballast Layer	Kazuhiro Koro
MS906	3	7/26(Tue)	16:00	16:15	327BC	15	2	152046	Derivation and Large Deformation Analysis of VFIFE-DKMT Thick Shell Element	Ren-Zuo Wang
MS906	3	7/26(Tue)	16:15	16:30	327BC	15	3	151752	A Hybrid Finite Element Formulation for Elastic Flexural Buckling Analysis of Fiber-Reinforced Laminate Composite Columns	vida niki
MS906	3	7/26(Tue)	16:30	16:45	327BC	15	4	150454	Development of an efficient contact algorithm for coupling of finite element method with material point method	Young-Jo Cheon
MS906	3	7/26(Tue)	16:45	17:00	327BC	15	5	151646	Monotone finite volume schemes for radiation diffusion equations	Jingyan Yue
MS906	4	7/26(Tue)	17:15	17:45	327BC	30	1	150761	Applications of Incremental Secant Stiffness in Nonlinear Structural Analysis-Theory, Formulation and Numerical Methods	Ying Wen
MS906	4	7/26(Tue)	17:45	18:00	327BC	15	2	151897	In-plane Rotational Contact of Beams in 3D Space	Hamid Reza Motamedian
MS906	4	7/26(Tue)	18:00	18:15	327BC	15	3	151544	Analysis of glass heat chamfering process using the structural relaxation model	Sung Jae Heo
MS906	4	7/26(Tue)	18:15	18:30	327BC	15	4	152197	Residual stress analysis of dissimilar multi-pass welded pipe joints considering the influence of welded sequence	JIE XIA
MS906	4	7/26(Tue)	18:30	18:45	327BC	15	5	151414	Elastic Behavior of Silicene under Tension and Bending: Atomistic Study	SangHyuk Yoo
MS906	5	7/27(Wed)	11:00	11:30	327BC	30	1	150064	Finite element simulations of a creeping wooden structure aiming for the design of an improved support structure	Kristofer Gamstedt
MS906	5	7/27(Wed)	11:30	11:45	327BC	15	2	150846	Prediction on initiation of fracture surface for punching process	Phyo Wai Myint
MS906	5	7/27(Wed)	11:45	12:00	327BC	15	3	151790	COMPUTATIONAL STUDY OF ACTIN FILAMENTS CROSS-LINKED WITH A FILAMIN UNDER THE MECHANICAL FORCE	Junki Baek
MS906	5	7/27(Wed)	12:00	12:15	327BC	15	4	150545	An asymptotic damage model for composite bolted joints structures	Feng Liao
MS906	5	7/27(Wed)	12:15	12:30	327BC	15	5	150816	An Integrated Linear Reconstruction for Finite Volume Scheme on Unstructured Grids	Li Chen
MS906	6	7/28(Thu)	11:00	11:15	318A	15	1	150604	Principle of Superposition in Structural Analysis and Design	Janusz Rębielak
MS906	6	7/28(Thu)	11:15	11:30	318A	15	2	152322	Dynamic Analysis of Complex and Combined Structures using Symbolic Dynamic Models	Konstantin Ashkinadze
MS906	6	7/28(Thu)	11:30	11:45	318A	15	3	151462	Development of 'Dynamics for Design' Procedure of Wind Turbine Drivetrain: Multibody Based Approach	Mohamed Shehata Saleh
MS906	6	7/28(Thu)	11:45	12:00	318A	15	4	151313	A Non-ordinary State-based Peridynamic Modeling of Spall Damage	Chaocong cong Wang

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS906	6	7/28(Thu)	12:00	12:15	318A	15	5	150986	Application of Particle Method to Liquid Dripping	Youhei SETA
MS906	6	7/28(Thu)	12:15	12:30	318A	15	6	150860	Transient Heat Conduction Analysis of Functionally Graded Material Based on Peridynamic Theory	Fei Wang
MS907	1	7/27(Wed)	15:30	16:00	327BC	30	1	150487	Adaptive Periodical Representative Volume Element for Simulating Periodical Postbuckling Behavior	Bin Liu
MS907	1	7/27(Wed)	16:00	16:15	327BC	15	2	150317	Chirality-controlled and defect-controlled CNTs fabricated by self-assembly of graphene nano-ribbons: MD simulations	Shaohua Chen
MS907	1	7/27(Wed)	16:15	16:30	327BC	15	3	150802	Numerical Simulation of Nonlinear Waves in Adhesive Layer	Guoshuang Shui
MS907	1	7/27(Wed)	16:30	16:45	327BC	15	4	151290	Modeling of nanocomposite structures	K.M. Liew
MS907	1	7/27(Wed)	16:45	17:00	327BC	15	5	152025	High-precision Solution Method for General Nonlinear Initial-Boundary Value Problems	Jizeng Wang
MS907	2	7/27(Wed)	17:15	17:45	327BC	30	1	150645	Internally Coupled Elastic Solid - Incompressible Viscous Liquid Continua in Infinite High Tubes	Manfred Göttlicher
MS907	2	7/27(Wed)	17:45	18:00	327BC	15	2	151169	An element-free analysis on mechanical behaviors of FG-CNT reinforced composite plates	LW Zhang
MS907	2	7/27(Wed)	18:00	18:15	327BC	15	3	151301	Molecular Dynamics Studying on Welding Behavior in Thermoset Polymers due to Bond Exchange Reactions	Hua Yang
MS907	2	7/27(Wed)	18:15	18:30	327BC	15	4	151160	Analysis of Mechanical Property of Glass Fiber Reinforced Thermoplastic Corrugated Sandwich Panel	Bing Du
MS907	2	7/27(Wed)	18:30	18:45	327BC	15	5	150734	Investigation on Simplified Bridge Models for Vehicle-Bridge Collision	Wuchao Zhao
MS907	3	7/27(Wed)	11:00	11:15	327A	15	1	152258	Optimization and Analysis of the Leading Edge Shape for the High Pressure Capturing Wing	Guangli Li
MS907	3	7/27(Wed)	11:15	11:30	327A	15	2	151310	High Accurate Analysis by Experiment and Simulation Using Bayesian Inference	Masahiko SHIMAMURA
MS907	3	7/27(Wed)	11:30	11:45	327A	15	3	151527	Reanalysis of Topological Modifications and Its Application to Local Mesh Refinement	Ren Yang
MS907	3	7/27(Wed)	11:45	12:00	327A	15	4	151383	Principal Representation of Inertia Matrix in Constrained Dynamic System and A Preconditioning Scheme for Numerical Simulation	Xiaoming Xu
MS907	3	7/27(Wed)	12:00	12:15	327A	15	5	150815	Toxic material detection using cantilever sensors in smart vehicle	Jinsung Park
MS908	1	7/26(Tue)	17:15	17:30	324	15	1	152094	Modeling and Analysis of Fluid-Structure Interaction of Flapping Rotary Wing	Wendong Liu
MS908	1	7/26(Tue)	17:30	17:45	324	15	2	151393	Numerical Thermal Model Simplification and Comparison of a Stratospheric Lighter-than-air Vehicle	Wei Zheng
MS908	1	7/26(Tue)	17:45	18:00	324	15	3	150195	A Study on Thermal Deformation Compensation of Large Space Structure	Kaori Shoji
MS908	1	7/26(Tue)	18:00	18:15	324	15	4	151051	Simulation of stratospheric airships under the condition of temperature changes by solar radiation	Song Qi
MS908	1	7/26(Tue)	18:15	18:30	324	15	5	151551	Investigation of creep-fatigue behavior in different sampling locations of a nickel-based turbine disc	Qihang Ma
MS908	1	7/26(Tue)	18:30	18:45	324	15	6	152194	Application of incremental Four-Dimensional Variational Method to Aviation Safety	Junho Cho
MS910	1	7/25(Mon)	17:15	17:30	324	15	1	150190	Large Deformation Analyses of a Square Frame by Experimental and Numerical Means	Yeong-Bin Yang
MS910	1	7/25(Mon)	17:30	17:45	324	15	2	152123	The Buckling Sphere	Herbert A. Mang
MS910	1	7/25(Mon)	17:45	18:00	324	15	3	150882	Dynamic Stability of Axially Moving Strings and Rods at Eulerian Description: Finite Element Analysis	Yury Vetyukov

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS910	1	7/25(Mon)	18:00	18:15	324	15	4	150739	Initial Postbuckling of Composite Stiffened Panels in Combined Shear and Compression	CHI ZHANG
MS910	1	7/25(Mon)	18:15	18:30	324	15	5	150762	Buckling Analysis by Using Higher-order beam theory (HoBT)	Do-Min Kim
MS910	1	7/25(Mon)	18:30	18:45	324	15	6	150513	Effects of structural geometrical nonlinearities on aeroelastic stability of a large wind turbine blade	Xian-dong Zhou
MS911	1	7/26(Tue)	11:00	11:15	324	15	1	152034	Automatic patient-specific numerical simulations with the Cartesian grid finite element method and image data recovery	Manuel Tur
MS911	1	7/26(Tue)	11:15	11:30	324	15	2	151598	A chainlike digital image correlation method for measuring small deformation	Jiang Hao
MS911	1	7/26(Tue)	11:30	11:45	324	15	3	152044	Direct Image Based Multiphase Flow Simulations	Luisa Silva
MS912	1	7/28(Thu)	11:00	11:30	327BC	30	1	151401	A stochastic multiscale model for transport properties of concrete	Xiaofei Guan
MS912	1	7/28(Thu)	11:30	11:45	327BC	15	2	151486	Simulation of shield tunnel synchronize grouting based on SPH method	Tianchi Zhao
MS912	1	7/28(Thu)	11:45	12:00	327BC	15	3	151412	Effect of Deep Shield Advancing Parameters on the Axial and Lateral Directions in the Soft Soil	LIU Shu Jia
MS912	1	7/28(Thu)	12:00	12:15	327BC	15	4	151794	A Simple Time-dependent Numerical Model for Analysis of Retaining Wall	Lai Yunjin
MS912	1	7/28(Thu)	12:15	12:30	327BC	15	5	150896	The influence of Water Depth to the Vibration Propagation Law and Rock Breaking Mechanism in Underwater Drilling Blasting	Yaxiong PENG
MS912	2	7/28(Thu)	15:30	15:45	327BC	15	1	150339	Numerical Simulating Analysis for Load Bearing Capacity of Steel Nose Pads Beam of Immersed Tunnel	Zhiming Zhang
MS912	2	7/28(Thu)	15:45	16:00	327BC	15	2	150332	Numerical Simulations of Vertical Pressure and Shear Mechanical Performance of Immersed Tunnel Joints	Jianhui Luo
MS912	2	7/28(Thu)	16:00	16:15	327BC	15	3	150438	Numerical simulation and assessment of the tunnel at a faulted zone crossing	Juntao CHEN
MS912	2	7/28(Thu)	16:15	16:30	327BC	15	4	150850	The Simulation of Different Shock Absorption Methods in Underwater Drilling and Blasting	Chen Chunhui
MS912	2	7/28(Thu)	16:30	16:45	327BC	15	5	150901	Nonlinear Simulation of Stagger-jointed Segmental Tunnel Linings	Zijie Jiang
MS912	2	7/28(Thu)	16:45	17:00	327BC	15	6	151009	Analytical Solution For An Infinite Euler–Bernoulli Beam On A Pasternak Foundation Subjected To Travelling Waves	Chuang Cai
MS912	3	7/27(Wed)	15:30	15:45	327A	15	1	150253	Study on Intensity Measure of Incremental Dynamic Analysis for Underground Structure	Tong Liu
MS912	3	7/27(Wed)	15:45	16:00	327A	15	2	151824	Three-dimensional Numerical Simulation for Large Cross-section Shield Tunnel with Middle Wall under Different Conditions	Xiufeng Xu
MS912	3	7/27(Wed)	16:00	16:15	327A	15	3	150306	A Numerical Approach for Compression-shearing Behavior of Deep Immersion Joint	Yikang Cheng
MS912	3	7/27(Wed)	16:15	16:30	327A	15	4	150281	Seismic Performance Assessment of Underground Structure Equipped with High-damping Rubber Bearings	Hu Zhao
MS912	3	7/27(Wed)	16:30	16:45	327A	15	5	150220	Numerical Simulation for Shaking Table Test of Complex Joints in Shield Tunnels	Jinghua Zhang
MS912	3	7/27(Wed)	16:45	17:00	327A	15	6	151307	Evolution of the mechanical behaviours of the soil adjacent to jacked piles in clay	Lin Li
MS913	1	7/25(Mon)	15:30	16:00	327A	30	1	150582	FEASIBLE LINE FOR PREDICTION OF THE STARTING POINT OF LANDSLIDE	Mingwu YUAN
MS913	1	7/25(Mon)	16:00	16:15	327A	15	2	152284	Rainfall Thresholds Based Warning Model for Shallow Landslides	Yun-Tae Kim
MS913	1	7/25(Mon)	16:15	16:30	327A	15	3	150563	High Performance Computing for Assessing Hazard of Earthquake induced Liquefaction in Urban Regions	Jian Chen

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS913	1	7/25(Mon)	16:30	16:45	327A	15	4	151185	Probabilistic Slope Stability Analysis Using the Probability Density Evolution Method	Xuri Li
MS913	1	7/25(Mon)	16:45	17:00	327A	15	5	151054	A Spatial and Probabilistic Risk Evaluation Method of Rockfalls	Hasuka Kanno
MS913	2	7/26(Tue)	15:30	16:00	324	30	1	150218	Seismic analysis on soil-foundation-superstructure system considering large deformation	Guanlin YE
MS913	2	7/26(Tue)	16:00	16:15	324	15	2	150440	Evaluation on the Seismic Performance of an existing Breakwater During and After Earthquake Using Finite Element Method	Xiaohua Bao
MS913	2	7/26(Tue)	16:15	16:30	324	15	3	151504	Simulation of Snow Avalanche Based on Snow-covered Model	Kenichi Oda
MS913	2	7/26(Tue)	16:30	16:45	324	15	4	150433	SPH-Based Simulations for slope Failure using elastic-plastic soil constitutive model	Yangjuan Bao
MS913	2	7/26(Tue)	16:45	17:00	324	15	5	151308	Research on perniciousness and methods for monitoring and computing of land subsidence	Guiying Dong
MS915	1	7/25(Mon)	15:30	15:45	324	15	1	150062	Leveraging CAE Technology for Innovative Design in the Enterprise ~Case Study for Innovative Design in Japan~	Tohru Hirano
MS915	1	7/25(Mon)	15:45	16:00	324	15	2	150954	Utilization of CAE Technology for Patent Application Strategy of Innovative Design in the Enterprise	Kenji Yasutake
MS915	1	7/25(Mon)	16:00	16:15	324	15	3	150252	Long-term Sealing Performance Simulation of Fluoropolymer Gasket for Automotive Lithium-ion Battery	Takahisa Aoyama
MS915	1	7/25(Mon)	16:15	16:30	324	15	4	150978	Designing Tire Materials for the Future -Innovative Molecular Simulation and Analysis Technology-	Masato Naito
MS915	1	7/25(Mon)	16:30	16:45	324	15	5	150161	Application of Dynamic Explicit FEM to Quasi-static Deformation Analysis of Large-scale Nonlinear Model	Jihong Liu
MS917	1	7/26(Tue)	11:00	11:15	327A	15	1	150854	A user-material routine for the visco-plastic ballooning and burst of Zircalloy nuclear fuel cladding in a Loss of Coolant Accident	Eran Landau
MS917	1	7/26(Tue)	11:15	11:30	327A	15	2	150722	A new structural behavior to perform efficient nonlinear SFR fuel bundle thermomechanical analysis	Bertrand LETURCQ
MS917	1	7/26(Tue)	11:30	11:45	327A	15	3	152204	A Neutronics-Thermomechanics (Fully-) Coupling Approach. Application to the deformation of nuclear cores.	Olivier FANDEUR
MS917	1	7/26(Tue)	11:45	12:00	327A	15	4	150773	Thermo-hydro-mechanical modelling of concrete containment in case of severe accident	Alain Millard
MS917	1	7/26(Tue)	12:00	12:15	327A	15	5	150198	Study on Safety Performance of Special Airtight Fire Door for Nuclear Power Plant Subjected to Wind-induced Projectile Impact	Wen-Na Zhang
MS917	2	7/27(Wed)	11:00	11:15	324	15	1	152216	Mechanical Topological Optimization using Cellular Automata	Clement BERTHINIER
MS917	2	7/27(Wed)	11:15	11:30	324	15	2	152198	COLL, a toolbox for distributed memory computing in Cast3m : presentation and application	Gauthier Folzan
MS917	2	7/27(Wed)	11:30	11:45	324	15	3	150915	Gap support application at a piping system of a nuclear power plant under seismic loading	Hyo-Jin Oh
MS918	1	7/27(Wed)	17:15	17:45	324	30	1	150474	Geomechanical Analysis during Gas Production from Deep Oceanic Gas Hydrate Deposits	Jihoon Kim
MS918	1	7/27(Wed)	17:45	18:00	324	15	2	151232	Impact of Stress on Anomalous Transport in Fractured Rock: From a Single Rough Fracture to Discrete Fracture Networks	Peter Kyungchul Kang
MS918	1	7/27(Wed)	18:00	18:15	324	15	3	151121	Simulation of Hydraulic Fracturing with Proppant Transport Based on the Extended Finite Element Method	Fang Shi
MS918	1	7/27(Wed)	18:15	18:30	324	15	4	151034	Numerical Simulation of Flows Including Rigid Bodies with Imposed Motion	Marcela Andrea Cruchaga
MS918	1	7/27(Wed)	18:30	18:45	324	15	5	150940	Computational Modeling of Bubbly Flow under Normal and Reduced Gravity Conditions	Qinggong Wang
MS918	2	7/27(Wed)	11:45	12:00	324	15	4	151116	3D Direct Numerical Simulation of Grain-Level Seepage Flow in Geomaterials	Ikkoh Tachibana

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS918	2	7/27(Wed)	12:00	12:15	324	15	5	150777	Finite Volume Analysis Models for Studying Iron Plume Migration in Non-equilibrium Groundwater Systems Subjected to Redox Boundary Conditions	Jaeshik Chung
MS919	1	7/26(Tue)	15:30	16:00	327A	30	1	151145	Coupled Structural and Heat Conduction Analysis of Laminated High Damping Rubber Bearing for Building Frame	Tomoshi Miyamura
MS919	1	7/26(Tue)	16:00	16:15	327A	15	2	150299	Detailed Finite Element Analysis of Concrete-Filled-Tube Column using E-Simulator with Extended Drucker-Prager Model considering Tension Crack and Compressive Damage in Concrete	Hiroyuki Tagawa
MS919	1	7/26(Tue)	16:15	16:30	327A	15	3	150365	Seismic Response Analysis of a Medium-Rise Reinforced Concrete Building Using a Detailed Finite Element Model	Masayuki Kohiyama
MS919	1	7/26(Tue)	16:30	16:45	327A	15	4	152140	Using Vector Form Intrinsic Finite Element in Pushover Analysis to Evaluate Seismic Performance of Reinforced Concrete Buildings	FU-PEI HSIAO
MS919	1	7/26(Tue)	16:45	17:00	327A	15	5	150967	Minimum Resolution Requirements in the Construction of Computational Models for Seismic Engineering Analysis	Juan Gomez
MS919	2	7/27(Wed)	17:15	17:30	304	15	1	150916	Reduced DOF Model for Seismic Response Analysis of Tall and Irregular Steel Frames	Yoshikazu Araki
MS919	2	7/27(Wed)	17:30	17:45	304	15	2	150564	Optimization of Flexible Supports for Seismic Response Reduction of Arches and Frames	Makoto Ohsaki
MS919	2	7/27(Wed)	17:45	18:00	304	15	3	150446	Optimal Design Method of a High-Rise Steel Building with Viscous Wall Dampers	Dan Zhang
MS919	2	7/27(Wed)	18:00	18:15	304	15	4	150142	A simplified model of 3D pile-soil-bridge structure dynamic interaction and sensitivity analysis for seismic response	Jianping Han
MS919	2	7/27(Wed)	18:15	18:30	304	15	5	151847	Adaptive Wake Measurement based on Data Assimilation	Takashi Misaka
MS919	2	7/27(Wed)	18:30	18:45	304	15	6	150128	Computing Platform of Substructure Shaking Table Testing Method Using Model-Based Integration Algorithms	Bo Fu
MS920	1	7/28(Thu)	11:00	11:15	324	15	1	152287	Integrating Natural Physical and Socio-Economic Dynamics in Global Water Circulation Modeling	Takahiro Sasaki
MS920	1	7/28(Thu)	11:15	11:30	324	15	2	152269	Tree-Crown-Resolving Large-Eddy Simulation for Thermal Environment Analysis in an Urban Green Space	Keigo Matsuda
MS920	1	7/28(Thu)	11:30	11:45	324	15	3	152148	Temperature and Wind analysis based on the particle trace calculations in LES simulations	Toru SUGIYAMA
MS920	1	7/28(Thu)	11:45	12:00	324	15	4	151929	Water Cycle Simulation using Atmosphere-Ocean-Land coupled model	Akio Kawano
MS922	1	7/28(Thu)	15:30	15:45	324	15	1	150279	Some Practical Considerations on the Implementation of the Tap-Scan Damage Detection Method	Zhihai Xiang
MS922	1	7/28(Thu)	15:45	16:00	324	15	2	151440	Study of Dynamic Performance of Large Movement Girder End Expansion Devices of Hutong Yangtse River Bridge	Mang mang Gao
MS922	1	7/28(Thu)	16:00	16:15	324	15	3	150155	A Two-Stage Technique for VBI Dynamic Analysis of High Speed Rails	J.D. YAU
MS922	1	7/28(Thu)	16:15	16:30	324	15	4	152085	Dynamic responses of an urban highway viaduct considering vehicle-bridge interaction under strong earthquakes	Sudanna Borjigin
MS922	1	7/28(Thu)	16:30	16:45	324	15	5	151842	Research on The Key Technology of Earthquake Early Warning System for High Speed Railway in China	Guo long Li
MS924	1	7/28(Thu)	11:00	11:30	320	30	1	151297	Flooding Damage Assessment through Simulation based on City Information Model	Sang-Ho Lee
MS924	1	7/28(Thu)	11:30	11:45	320	15	2	152395	Stability Analysis of Unsaturated Soil Slope Considering Water-Air Flow Induced by Rainfall Infiltration	Sung Eun Cho
MS924	1	7/28(Thu)	11:45	12:00	320	15	3	152417	Reconstruction of Cement Pate Specimens with Gradient Void Distribution	Tong-Seok Han
MS924	1	7/28(Thu)	12:00	12:15	320	15	4	152406	Dynamic Fracture of Materials with Microstructure by Using Multiscale Cohesive Zone Modeling	Kyoungsoo Park
MS924	2	7/29(Fri)	8:30	8:45	324	15	1	152423	A case study on analysis of landslide temporal assessment in Busan area using ERI	Deuk-hwan Lee

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS924	2	7/29(Fri)	8:45	9:00	324	15	2	152430	Sequential Surrogate Modeling for Time-consuming Finite Element Analysis with Self-adaptive Sampling	Seung-Seop Jin
MS924	2	7/29(Fri)	9:00	9:15	324	15	3	152427	High Velocity Impact Resistance of SC Walls: Numerical and Analytical Approaches	Jae-Wook Jung
MS924	2	7/29(Fri)	9:15	9:30	324	15	4	150383	FE based preliminary thermal analysis to evaluate the curing efficiency of heating elements in mass concrete	Geun U Ryu
MS941	1	7/26(Tue)	17:15	17:45	327A	30	1	152093	Recent Advances in Mass Templates for Structural Dynamic Applications	Carlos A Felippa
MS941	1	7/26(Tue)	17:45	18:00	327A	15	2	151158	Inverse mass matrix for explicit time integration via the method of localized Lagrange multipliers	José A. González
MS941	1	7/26(Tue)	18:00	18:15	327A	15	3	150764	A Selective Mass Scaling Method For Shear Wave Propagation Analyses In Nearly Incompressible Materials	wenfeng Ye
MS941	1	7/26(Tue)	18:15	18:30	327A	15	4	151173	Efficient tetrahedral finite elements for explicit dynamics	Anton Tkachuk
MS941	1	7/26(Tue)	18:30	18:45	327A	15	5	150600	Analysis of the Source Physics Experiments using state-of-the-art parallel numerical tools	Oleg Vorobiev
MS941	2	7/25(Mon)	11:00	11:30	324	30	1	150878	Heterogeneous Asynchronous Time Integrator for Impact and Contact Dynamics	Fatima FEKAK
MS941	2	7/25(Mon)	11:30	11:45	324	15	2	151619	Application of Nitsche's approach to explicit scheme in dynamic problem	Norio Shimizu
MS941	2	7/25(Mon)	11:45	12:00	324	15	3	151605	Multistep Time Integration for Discontinuous Stress Wave Propagation in Heterogeneous Solids	Sang Soon Cho
MS941	2	7/25(Mon)	12:00	12:15	324	15	4	151174	Explicit partitioned shear and longitudinal wave propagation algorithm in dynamic contact problems	Radek Kolman
MS942	1	7/25(Mon)	17:15	17:45	327A	30	1	150212	Mass-redistributed finite element method in the structural-acoustic interaction problem	Eric LI
MS942	1	7/25(Mon)	17:45	18:00	327A	15	2	150242	A New Family of Unconditionally Stable Explicit Algorithms for Structural Dynamics	Shi Li
MS942	1	7/25(Mon)	18:00	18:15	327A	15	3	151334	A New Formulation for Component Mode Synthesis via Localized Lagrange Multipliers	In Seob Chung
MS942	1	7/25(Mon)	18:15	18:30	327A	15	4	151092	Advances in Computational Methods for Self-Excited Vibrations and Flapping Dynamics	Rajeev Kumar Jaiman
MS942	1	7/25(Mon)	18:30	18:45	327A	15	5	151795	Designs of Acoustic Black Holes with Arbitrary Geometries	Weikai Xu
MS942	2	7/27(Wed)	11:00	11:15	325	15	1	151910	A CFD-based methodology to calculate the acoustic transfer impedance of thin triaxial woven fabrics	Romain Rumpler
MS942	2	7/27(Wed)	11:15	11:30	325	15	2	150136	Modeling approaches for numerical simulations that consider the influence of motor oil on the engine acoustics	Fabian Duvigneau
MS942	2	7/27(Wed)	11:30	11:45	325	15	3	150063	The modal frequency of a 60.80-m-high mobile phone mast system calculated analytically and by the FEM	Alexandre de Macêdo Wahrhaftig
MS942	2	7/27(Wed)	11:45	12:00	325	15	4	150181	Dynamic Responses of Ballastless Track Slabs under Bidirectional High-Speed Train Loads	Jin Chen
MS942	2	7/27(Wed)	12:00	12:15	325	15	5	151781	Improved smoothed finite element method (ISFEM) for acoustic analysis in mid-frequency range	He Zhicheng
MS942	2	7/27(Wed)	12:15	12:30	325	15	6	152256	Vibration Analysis of Functionally Graded Microplates based on Modified Couple Stress Theory	Hoang Xuan Nguyen
MS943	1	7/25(Mon)	17:15	17:45	325	30	1	150475	Analysis of the heat release rate and acoustic response of a turbulent premixed flame	Wolfgang Schroeder
MS943	1	7/25(Mon)	17:45	18:00	325	15	2	150602	Effect of DDES and IDDES Modelling on the Simulation of Turbulent Flows for Aeroacoustics	Marc C. Jacob
MS943	1	7/25(Mon)	18:00	18:15	325	15	3	151418	Investigation of Aerodynamic Noise Source Generation and Transmission of Vehicle Wind Noise Recognized by Passengers	Munhwan Cho

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS943	1	7/25(Mon)	18:15	18:30	325	15	4	151040	Numerical Analysis of the Acoustic Field of Tip-Clearance Flow	Seyed Mohsen Alavi Moghadam
MS943	1	7/25(Mon)	18:30	18:45	325	15	5	151293	Turbulent boundary layer noise in pipe flow	Young June Moon
MS944	1	7/26(Tue)	11:00	11:15	325	15	1	151604	A topology optimisation in 2D acoustics with a fast direct boundary element method	Sugihara Soichiro
MS944	1	7/26(Tue)	11:15	11:30	325	15	2	151536	A topology optimisation of cloaking devices with a boundary element method accelerated by a H-matrix method	Kenta Nakamoto
MS944	1	7/26(Tue)	11:30	11:45	325	15	3	150783	A Numerical Approach to Calculate Multivariate Transcendental Equations in Complex Number Domain	Feng ZHU
MS944	1	7/26(Tue)	11:45	12:00	325	15	4	152126	Model Order Reduction Techniques for Damped Vibrating Systems - a Comparison of Different Approaches	Martin Buchschmid
MS944	1	7/26(Tue)	12:00	12:15	325	15	5	150825	A Hybrid Finite Element - Wave Based Modelling Technique for the Analysis of 2D Sound Absorbing Biot's Poroeleastic Materials	Joong Seok Lee
MS946	1	7/26(Tue)	17:15	17:30	325	15	1	150401	Vortex Induced Vibration of Two Identical Low-mass Spring-supported Circular Cylinders in Proximity with Reynolds Number of 100	Meng-Hsuan Chung
MS946	1	7/26(Tue)	17:30	17:45	325	15	2	150549	A Phase Field Model to Simulate Vortex-induced Vibrations of Subsea Pipelines with the Scouring Effects	Boo Cheong Khoo
MS946	1	7/26(Tue)	17:45	18:00	325	15	3	152222	Investigation of Effects of Rotational Nonequilibrium on Shock-Vortex Interaction Using NCCR Model Based on the Boltzmann-Curtiss Equation	Satyvir Singh
MS946	1	7/26(Tue)	18:00	18:15	325	15	4	151028	Solving high-order PDEs modelling elastic and reaction waves	Dmitry Strunin
MS946	1	7/26(Tue)	18:15	18:30	325	15	5	152157	Numerical Solutions of Partial Differential Equations Using an Adaptive Wavelet Method	Samuel Paolucci
MS947	1	7/25(Mon)	11:00	11:30	327A	30	1	151976	Three-dimensional P- and S-wave velocity profiling of geotechnical sites using full-waveform inversion driven by field data	Loukas F Kallivokas
MS947	1	7/25(Mon)	11:30	11:45	327A	15	2	152347	Advanced impact-echo testing using hexagonal air-coupled sensor array	Seong-Hoon Kee
MS947	1	7/25(Mon)	11:45	12:00	327A	15	3	150494	VIBRATIONS IN A CRACKED CLASSICAL PLANAR RECTANGULAR FRAME	Chunhui Mei
MS947	1	7/25(Mon)	12:00	12:15	327A	15	4	151975	Wave energy focusing to target subterranean formations: a comparison between a time reversal and an inverse-source approach	Seungbum Koo
MS947	1	7/25(Mon)	12:15	12:30	327A	15	5	150749	Numerical Modeling of Grain Size Effects on Ultrasonic Propagation in Polycrystalline Materials	Xue BAI
MS947	2	7/25(Mon)	15:30	16:00	325	30	1	151391	Moving Medium Wave Equation for an Acoustic Meta-material in Non-Uniform Mean Flow	Wonju Jeon
MS947	2	7/25(Mon)	16:00	16:15	325	15	2	151875	Waveform Analysis In Acoustic Logs For Cased Boreholes Interpretation Through Seismic Reflection Techniques	Jose David Arjona
MS947	2	7/25(Mon)	16:15	16:30	325	15	3	151974	Earth dam imaging based on shear waveform inversion driven by limited crosshole data	Heedong Goh
MS947	2	7/25(Mon)	16:30	16:45	325	15	4	150520	A front-capturing method for shock/droplet interaction under different density ratios	Xiang Gao Ming
MS947	2	7/25(Mon)	16:45	17:00	325	15	5	152346	Inverse scattering of plane microwaves in PML-truncated domains	Namho Joh
MS961	1	7/27(Wed)	17:15	17:30	327A	15	1	150093	Geometrically Nonlinear FE Analysis for Macro-Fiber Composite Integrated Plates and Shells (MS527)	Shunqi Zhang
MS961	1	7/27(Wed)	17:30	17:45	327A	15	2	150683	A new F.E. for steel beam-to-column joint under cyclic loading	samy GUEZOULI
MS961	1	7/27(Wed)	17:45	18:00	327A	15	3	150497	Consideration of POD Interpolation for Aeroelastic Design use Structural Dynamic Reanalysis	Li Dongfeng
MS961	1	7/27(Wed)	18:00	18:15	327A	15	4	150511	Free Vibration Analysis of Functionally Graded Open Cylindrical Panels Using a Higher Order Shear and Normal Deformation Theory	Devesh Punera

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MS961	1	7/27(Wed)	18:15	18:30	327A	15	5	150083	On the Modeling of Laminated Composite Plates Using the Quasi-Conforming Solid-Shell Element	Yu Wang
MS961	1	7/27(Wed)	18:30	18:45	327A	15	6	150051	Bergan-Wang Solution of Clamped Moderately Thick Rectangular Plates	Kamal Mohamed HASSAN
MS961	2	7/27(Wed)	15:30	15:45	324	15	1	150413	Nonlinear Vibration of a Composite Laminated Stiffened Plate with Internal Resonance under Thermal Environment	Bo Zhang
MS961	2	7/27(Wed)	15:45	16:00	324	15	2	150699	Finite Element Beam Analysis of FRP Composite Thin-walled Box Beams by Using Higher-order Beam Theory	Dongil Shin
MS961	2	7/27(Wed)	16:00	16:15	324	15	3	150543	Plate Bending Analysis by Equilibrium Finite Element Method	Paulina Zimmicka
MS961	2	7/27(Wed)	16:15	16:30	324	15	4	150668	Thermomechanical Bending Analysis of Functionally Graded Sandwich Plates Using Four-Variable Refined Plate Theory	Dongdong Li
MS961	2	7/27(Wed)	16:30	16:45	324	15	5	150652	A High-Performance Quadrilateral Shell Element For Large Deformation Simulation In Opensees	Yuan Tian
MS962	1	7/29(Fri)	8:30	8:45	327A	15	1	150256	The influence of interface roughness on stress evolution with the creep-plastic behavior of TGO	Yi-Jun CHAI
MS962	1	7/29(Fri)	8:45	9:00	327A	15	2	151181	Thickness Optimization of Thermal Barrier Coatings for Gas Turbine Blade based on Finite Element Analysis	Biao Li
MS962	1	7/29(Fri)	9:00	9:15	327A	15	3	150979	Real-time damage evolution of double-ceramic-layer thermal barrier coatings with different ceramic's thickness ratio under bending	Peng Jiang
MS962	1	7/29(Fri)	9:15	9:30	327A	15	4	150713	Study of shrinkage and Young's modulus evolution induced by sintering of thermal barrier coatings with a multi-connection model	bowen lu
MS962	1	7/29(Fri)	9:30	9:45	327A	15	5	151532	A Suggestion to Durable Design of Vertically Cracked Thermal Barrier Coatings	Janggyun Lim
MS962	2	7/27(Wed)	17:15	17:30	314	15	1	151197	Thin Film Deposition using Rarefied Gas Jet	Sahadev Pradhan
MS962	2	7/27(Wed)	17:30	17:45	314	15	2	151350	A Fourier-related double scale analysis for wrinkling phenomena of circular membranes	Wei Huang
MS962	2	7/27(Wed)	17:45	18:00	314	15	3	151466	Computational modeling of Environmental Barrier Coatings using high-throughput FEA and cohesive zone models	Stephen Sehr
MS962	2	7/27(Wed)	18:00	18:15	314	15	4	151554	The diffusion-healing and morphological evolution of macro-crack within particulate composite materials	JunNan Lv
MS963	1	7/29(Fri)	11:00	11:30	327BC	30	1	152060	Influence of out-of-plane shear stress on the Forming Limit Curve of a DP780 steel sheet	Diego Javier Celentano
MS963	1	7/29(Fri)	11:30	11:45	327BC	15	2	151597	Analysis of Failure by Strain Localization of Advanced High Strength Hot-rolled Steel Sheets	Wonjae Kim
MS963	1	7/29(Fri)	11:45	12:00	327BC	15	3	151591	Estimation of Shear Fracture Strain of 4130 Alloy Steel at Ultra-High Strain Rates	Hyeonu Choe
MS963	1	7/29(Fri)	12:00	12:15	327BC	15	4	151429	Formability limits by Fracture for Brass and INOX304	Kishore Jagannath Jawale
MS963	1	7/29(Fri)	12:15	12:30	327BC	15	5	151268	Development of combined deep drawing and electromagnetic sharp edge forming of DP980 steel sheet	Min Kuk Choi
MS963	2	7/28(Thu)	11:00	11:30	327A	30	1	150162	Implicit Integration of Plasticity Models via Trust-Region Methods	Brian T Lester
MS963	2	7/28(Thu)	11:30	11:45	327A	15	2	151242	Hardening Behaviors of 4130 Steel, OFHC copper, and Ti6Al4V alloy at High Strain Rate and High Temperature	MingJun Piao
MS963	2	7/28(Thu)	11:45	12:00	327A	15	3	150679	Prediction of the onset of fracture of DP980 steel 1.2t under typical loading conditions based on associated and non-associated flow rules	Namsu Park
MS963	2	7/28(Thu)	12:00	12:15	327A	15	4	151326	Shell Element for Considering Thickness Change and Surface Traction	Takeki Yamamoto
MS963	2	7/28(Thu)	12:15	12:30	327A	15	5	151123	Asymmetric Mechanical Properties of TRIP980 and TWIP980 Steel Sheets at Various Strain Rates	GUENSU JOO

Session	Session No.	Date	Start Time	Finish Time	Room No.	Presentation Time(Minute)	Order	Paper No.	PaperTitle	Presenter
MS964	1	7/28(Thu)	15:30	15:45	327A	15	1	151340	Response control of geometrically imperfect, laminated beams under compression: a solution based on the Refined Zigzag Theory	Marco Gherlone
MS964	1	7/28(Thu)	15:45	16:00	327A	15	2	151443	Higher-Order Zig-zag Theories for Laminated Composite Plates Based On Nonlocal Elasticity	Jun-Sik Kim
MS964	1	7/28(Thu)	16:00	16:15	327A	15	3	151555	Geometrically Nonlinear Analysis of Laminated Composite Plates by using Enhanced First-order Shear Deformation Theory	Jang-Woo Han
MS964	1	7/28(Thu)	16:15	16:30	327A	15	4	150982	Hydrothermal analysis on the viscoelastic response of composite laminate based on higher order zigzag theory	Sy-Ngoc Nguyen
MS982	1	7/28(Thu)	11:00	11:15	304	15	1	150141	DATA MINING FOR MODEL CALIBRATION IN HETEROGENEOUS PLASTICITY	David Rycckelynck
MS982	1	7/28(Thu)	11:15	11:30	304	15	2	151332	Reduced Mode Selection for the Craig-Bampton Component Mode Synthesis Method	Soo Min Kim
MS982	1	7/28(Thu)	11:30	11:45	304	15	3	151689	Statistical Validation for Rotor Dynamics Model of a Journal Bearing Rotor System	Hwanoh Choi
MS983	1	7/29(Fri)	8:30	8:45	304	15	1	150893	The Mechanism and Numerical Simulation Analysis of Water Bursting in Filling Karst Tunnel	Bo Li
MS983	1	7/29(Fri)	8:45	9:00	304	15	2	151911	An Application of Convected Particle Domain Interpolation Technique to Large Deformation Analysis of Geomaterials	Takatoshi Kiriyaama
MS983	1	7/29(Fri)	9:00	9:15	304	15	3	152069	Uncertainties in Geotechnical Centrifuge Modeling	Yasuhiro Ikami
MS983	1	7/29(Fri)	9:15	9:30	304	15	4	151267	Uncertainty Quantification of DEM Simulations with a Benchmark Test for Rigid Body Motions	Shuji Moriguchi
MS983	1	7/29(Fri)	9:30	9:45	304	15	5	151147	Seismic response analysis of centrifugal model test on embankment-foundation systems	Kentaro Nakai
MS983	1	7/29(Fri)	9:45	10:00	304	15	6	151129	Simulation and Measurement of Crack Propagations in Concrete toward the V&V Analysis	Mao Kurumatani

■ Poster Session Schedule

P.Type	Paper No.	PaperTitle	PS No.	Date	Start Time	-	Finish Time	Room No.	Presenter
Poster	152217	Cellular Creep Effect on Cell Adhesion	2	7/25(Mon)	15:30	-	17:00	309	Long Li
Poster	152016	Numerical Simulation of Flow Regime around Water Leak in Pipeline based on Navier-Stokes Equations	2	7/25(Mon)	15:30	-	17:00	309	Masaomi Kimura
Poster	151757	Molecular dynamics simulation of gas flow through nanochannels with designed wall roughness	2	7/25(Mon)	15:30	-	17:00	309	Ran Zhang
Poster	151747	An accurate and robust flux splitting scheme for hypersonic flow computations	2	7/25(Mon)	15:30	-	17:00	309	Wenjia Xie
Poster	151696	Molecular Dynamics Simulation of Nanoindentation about TiO2 Nanotube on the Atomic Scale	2	7/25(Mon)	15:30	-	17:00	309	Jungsik Choi
Poster	151278	An Improved Element For Accurately Simulating The Prestressing Tendon	2	7/25(Mon)	15:30	-	17:00	309	zhuo chen
Poster	150946	Development of the Numerical Simulation for Saturated-Unsaturated Groundwater and Intake Pipe Flows	2	7/25(Mon)	15:30	-	17:00	309	Issaku AZECHI
Poster	150676	Computation of Natural Convection in an Open Inclined Tube with Constant Wall Temperature	2	7/25(Mon)	15:30	-	17:00	309	Youngmin Bae
Poster	151683	A Refined Model for Bistability of Symmetrically Laminated Cylindrical Panels	5	7/26(Tue)	15:30	-	17:00	309	Jianhui Zhang
Poster	150795	Dynamic Buckling of an Elastic Bar Under Axial Step Loading Based on Minimum Acceleration Principle	5	7/26(Tue)	15:30	-	17:00	309	Feng Xi
Poster	152418	First-principles study of structural and mechanical stability of binary Zirconium-Silicon and Titanium-Silicon alloy under pressure	5	7/26(Tue)	15:30	-	17:00	309	Xiaoli Yuan
Poster	152320	Mechanical properties characterization for a cylindrical fuel clad using the segmented expanding cone-mandrel (SEM) method	5	7/26(Tue)	15:30	-	17:00	309	matan tubul
Poster	152224	Nonlinear hysteretic model and finite element analysis of magnetoelectric effect for tri-layered composites	5	7/26(Tue)	15:30	-	17:00	309	Juanjuan Zhang
Poster	152127	An Amended 8-chain Model for Rubber-like Materials	5	7/26(Tue)	15:30	-	17:00	309	Bin Fu
Poster	151695	A Study on the Safety Performance Evaluation of Guardrail under Impact	5	7/26(Tue)	15:30	-	17:00	309	Sang-Hyun Hong
Poster	150108	Mesoscale Thermal-mechanical Simulation of Impacted Granular Explosives and Polymer-bonded Explosives	5	7/26(Tue)	15:30	-	17:00	309	Yanqing Wu
Poster	152278	Topology Optimization with Isogeometric Concept	8	7/27(Wed)	15:30	-	17:00	309	Gyeong-Im Park
Poster	152274	Continuum Model for 2D Granular Systems	8	7/27(Wed)	15:30	-	17:00	309	Haolei Wang
Poster	152257	Ghost Force Removal for 3D Atomistic/Continuum Coupling Method	8	7/27(Wed)	15:30	-	17:00	309	Lidong Fang

P.Type	Paper No.	PaperTitle	PS No.	Date	Start Time	-	Finish Time	Room No.	Presenter
Poster	152255	A Generalization of Shakhov Kinetic Model for Gases of Identical Quantum Particles	8	7/27(Wed)	15:30	-	17:00	309	Juan-Chen Huang
Poster	152203	Generalized Parametrical Integral Equations Systems With NURBS For Modelling The Shape Of The Boundary In Potential Problems	8	7/27(Wed)	15:30	-	17:00	309	Eugeniusz Zieniuk
Poster	152202	Modeling using surface patches in PIES for Elastoplastic Boundary Value Problems	8	7/27(Wed)	15:30	-	17:00	309	Agnieszka Bołtuć
Poster	152068	A Space-Time Fully Decoupled Wavelet Galerkin Method for Solving Generalized Nonlinear Diffusion-Wave Problems	8	7/27(Wed)	15:30	-	17:00	309	Xiaojing Liu
Poster	151831	Multi-objective Design of Thin-walled Structures Using VICONOPT MLOP	8	7/27(Wed)	15:30	-	17:00	309	Shuang Qu
Poster	151687	The Application of the Direct-forcing Immersed Boundary Modeling based on Medical Image for the Aerodynamics Characteristics in Upper Airway	8	7/27(Wed)	15:30	-	17:00	309	Tzu-I Tseng
Poster	151299	Optimal Design of Hyperelastic Structures with Frictionless Contact Supports	8	7/27(Wed)	15:30	-	17:00	309	Yangjun LUO
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Poster	150191	Dispersion analysis of elastic waves in isotropic media discretized by the energy-orthogonal twenty-node hexahedral finite element	11	7/28(Thu)	15:30	-	17:00	309	Francisco Brito