



# OpenSEES Days Eurasia 2019

Conference Programme

20 – 21 June 2019

**Session 1: 20 June 2019 (Morning)**

Start	End	Session	Authors
08:30	09:00	Registration	
09:00	09:30	Opening ceremony	
09:30	10:00	Keynote 1.	Filip Filippou
10:00	10:15	Development of CSMM-based Membrane and Shell Elements for Concrete Structures	Tianmin Zhou, Jamshaid Sawab, Y.L. Mo, Thomas T.C. Hsu
10:15	10:30	Explicit Second-Order Mixed Formulation of Concrete Elements Subjected to Impact Loads	Samer Gendy, Ashraf Ayoub
10:30	10:45	Macro-Element for The Modelling of In-Plane and Out-Of-Plane Behaviour of Masonry Walls	Francesco Vanin, Katrin Beyer
10:45	11:00	Modeling and Assessment of Masonry Infilled Reinforced Concrete Frames Subject to Accidental Column Losses	Fabio Di Trapani, Luca Giordano, Giuseppe Carlo Marano, Mihaela Sabina Chiper, Patrizia Castellana
11:00	11:30	Coffee Break	
11:30	12:00	Keynote 2.	Xinzheng Lu
12:00	12:15	Numerical Simulation on Hysteretic Behavior of Reinforced Concrete Beam-Column Joints	Sun Guangjun, Yuan Zhi-jie, Jiang Wen
12:15	12:30	An OpenSEES Framework to Build Displacement Demand Spectra for Portal-Frame Industrial Facilities	Fabio Di Trapani, Giuseppe Andrea Ferro, Marzia Malavisi, Alessandro Vicentini
12:30	12:45	Benchmark Study of 3D Steel Frames in Fire Using OpenSEES	Jian Jiang, Guo-Qiang Li
12:45	13:00	Methods for Predicting Peak Inelastic Drift and Acceleration Response of Concentrically Braced Frame Structures	John Hickey, Brian Broderick
13:00	14:30	Lunch	



**Session 2: 20 June 2019 (Afternoon)**

Start	End	Session	Authors
14:30	14:45	Introduction to Eurasian OpenSEES Association	Giorgio Monti, Filip Filippou, Asif Usmani
14:45	15:15	Keynote 3.	Giorgio Monti
15:15	15:30	Evaluation of the Failure of the Daikai Station	Cai Xuesong, Yang Chengyu, Yuan Yong
15:30	15:45	Effects of Simplified Modeling on Bridge Seismic Vulnerability and Risk Assessment	Jing Qian, Banfu Yan, Yang Zhang, You Dong
15:45	16:00	Damage Detection of 2D Earthquake-Resistant Steel Frames Using Vibration Characteristics	Luc-Hoang-Hiep Nguyen, Duc-Duy Ho
16:00	16:15	Impacts of Modelling Uncertainty in the Seismic Collapse Risk Assessment of the Building	Satwik Pankajkumar Rayjada, Jayadipta Ghosh, Meera Raghunandan
16:15	16:30	3D Seismic Site Response with Soil Heterogeneity and Wave Scattering in OpenSEES	Christopher de la Torre, Christopher McGann, Brendon Bradley
16:30	17:00	Coffee Break	
17:00	17:15	Seismic Response Analysis of RAC Space Frame Structure	Changqing Wang
17:15	17:30	Effect of Collapse Criteria on Seismic Collapse Resistance of RC Frame Structures Using Explicit Algorithm	Pengju Zhao, Xiaohui Yu, Xinzhen Lu
17:30	17:45	Experimental and Numerical Analysis on Seismic Performance of Precast Bridge Piers Connected by Grouted Corrugated Duct	Hao Lv, Zhiqiang Wang, Hongyi Wei, Chengjun Wu, Wei Xiao
17:45	18:00	Modelling for Simplified Seismic Analysis of Soil-Pile System	Bala Harsha Teja Srusti, Amit Prashant, Gautam Mondal
18:30		Banquet: 4/F, Staff Restaurant, Communal Building, The Hong Kong Polytechnic University	

**Session 3: 21 June 2019 (Morning)**

Start	End	Session	Authors
08:30	09:00	Registration	
09:00	09:15	Opening Ceremony for day 2	
09:15	09:30	Response of RC Frames Under Pulse-like Seismic Ground Motion: Preliminary Results	Cristoforo Demartino, Giuseppe Quaranta, Fabrizio Mollaioli
09:30	09:45	A Software Framework for GPU Based Finite Element Parallelization on OpenSEES Framework	Yuan-Sen Yang, Bo-Yuan Sun, Weichung Wang
09:45	10:00	Automatic Calibration of Constitutive Models in STKO Pre-Processor	Luisa Berto, Guido Camata, Massimo Petracca, Anna Saetta, Diego Talledo
10:00	10:15	Mixed Formulation of Shear Critical Composite Steel-Concrete Elements with Partial Slip	Dipankar Das, Ashraf Ayoub
10:15	10:30	A Model Updating Algorithm for Hybrid Simulation Leading to Improved OpenSEES Modelling Accuracy for CBF Structures	Brian Broderick, John Hickey, Terence Ryan
10:30	10:45	Implementation Into OpenSEES of Triangular and Quadrangular Shell Finite Elements With Drilling Degrees of Freedom	Sebastiano Fichera, Bruno Biondi
10:45	11:00	Modelling of the Over Stroke Displacement of Curved Surface Sliders Using OpenSEES	Antonio Di Cesare, Felice Carlo Ponzo, Alessio Telesca, Domanico Nigro, Gabriella Castellano, Samuele Infanti, Maurizio Fichera
11:00	11:30	Coffee Break	

**Session 3: 21 June 2019 (Morning - continued)**

Start	End	Session	Authors
11:30	11:45	A Novel Steel Material Model for Structural Thermo-Mechanical Analysis in Fire	Mian Zhou, Rui Cardoso, Hamid Bahai, Asif USmani
11:45	12:00	Seismic Upgrade of Self-Centering RC Walls Using Sma Bars and Replaceable Energy Dissipating Devices	Bin Wang, Songye Zhu
12:00	12:15	An Overview of OpenSEES for Fire	Mhd Anwar Orabi, Aatif Alikhan, Asif Usmani
12:15	12:30	Comparison of the Seismic Response of Slender Pier Based on OpenSEES and Explicit Fiber Beam Column (EFBC) Element	Chunguang Liu, Chunxu Xia
12:30	12:45	A Simplified Opensees Model of Horizontal-Axis Wind Turbines Under Combined Wind and Seismic Induced Loads	Alberto Maria Avossa, Cristoforo Demartino, Mustafa Vardaroglu, Vincenzo Picozzi
12:45	13:00	Challenges in Simplified Modeling of Duo-Pile Foundation System	Kolli Mohan Krishna, Amit Prashant, Dhiman Basu
13:00	14:30	Lunch	

**Session 4: 21 June 2019 (Afternoon)**

Start	End	Session	Authors
14:30	14:45	Application of an Extended Travelling Fire Method (ETFM) Framework on the Veseli Travelling Fire Test Building using OpenSees	Xu Dai, Stephen Welch, Asif Usmani
14:45	15:00	OpenSEES GUI for Elastomeric Seismic Isolation Systems	Mohammad AlHamaydeh, Muhammad Siddiqi
15:00	15:15	Economic Loss Evaluation Comparing Component and System-level Fragility Assessment Methods	Ghazanfar Ali Anwar, You Dong
15:15	15:30	Tension-Compression Damage Model with IMPL-EX Algorithm for Micromodeling of Masonry Structures	Luisa Berto, Guido Camata, Massimo Petracca, Anna Saetta, Diego Talledo
15:30	15:45	A Method to Include Soil-abutment Interaction in Nonlinear Analysis of Bridges	Davide Noè Gorini, Luigi Callisto, Andrew J. Whittle, Salvatore Sessa
15:45	16:00	Parametric Modeling of Timber Light-Frame Shear Walls Using OpenSEES: Preliminary Results	Giorgia Di Gangi, Cristoforo Demartino, Giuseppe Quaranta, Giorgio Monti
16:00	16:15	Flexure-Shear Interaction in Seismic Assessment of Reinforced Concrete Buildings	Alessandro Rasulo, Angelo Pelle, Davide Lavorato, Gabriele Fiorentino, Camillo Nuti
16:15	16:30	Modeling the Seismic Response of Walls Anchored With Unbonded Tendons	Christos Zeris, Ilias Giannakeas
16:30	16:45	Closing ceremony	
16:45	17:30	Coffee and networking session	