

The 15th International Symposium on Structural Engineering (ISSE-15)

Oct.24-27, 2018

Hangzhou, China

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Organized by

Zhejiang University

Co-organized by

Zhejiang University of Technology

Ningbo Institute of Technology, Zhejiang University

Overview

Wednesday Oct 24, 2018		
13:00-22:00	Registration	Eastern Lobby in First World Hotel
18:00-20:00	Dinner (buffet)	Thai Restaurant
Thursday Oct 25, 2018		
8:00-18:00	Registration	Eastern Lobby in First World Hotel
8:30-9:00	Opening Ceremony	The First World Hall
9:00-12:40	Keynote Lectures: Shilin DONG, Jinping OU, Changwen MIAO, Lili XIE, Xuhong ZHOU, Jinguang Teng	The First World Hall
12:40-14:00	Lunch (buffet)	Thai Restaurant
14:00-17:55	Invited Lectures and Session Lectures	
18:00-20:30	Welcoming Banquet	Tropical rainforest atrium
Friday Oct 26, 2018		
8:30-11:55	Invited Lectures and Session Lectures	
12:00-14:00	Lunch (buffet)	Thai Restaurant
14:00-17:40	Invited Lectures and Session Lectures	
18:00-20:00	Dinner (buffet)	Thai Restaurant
20:30-21:30	Meeting of Academic Committee	
Saturday Oct 27, 2018		
8:30-12:00	Keynote presentations: Yanliang DU, Zhengqing CHEN, B.F. SPENCER, Zhishen WU, Yimin XIE, C.B. YUN	The First World Hall
12:00-12:40	Discussion and Closing Ceremony	The First World Hall
12:40-14:00	Lunch (buffet)	Thai Restaurant
14:00-17:00	Technical Tour	

Opening and Keynotes

Thursday Oct 25, 2018

8:30-9:00	Opening Ceremony	
Keynote presentations Chairs: Prof. Jinguang TENG and Prof. Xilin LU Secretary: Tao MENG / 13606700877		
9:00-9:30	Shilin DONG	索穹顶体系创新研究及葵花双撑杆型索穹顶预应力态分析
9:30-10:00	Jinping OU	Structural Health Monitoring and the Life Prediction and Maintenance of Civil Infrastructures
10:00-10:30	Changwen MIAO	Study on Improvement Technology for Durability of Concrete
10:30-11:10	Group picture taking and coffee break	
Keynote presentations Chairs: Prof. Jinping OU and Prof. Qingrui YUE Secretary: Tao MENG / 13606700877		
11:10-11:40	Lili XIE	韧性城市：从结构抗震到城市抗震
11:40-12:10	Xuhong ZHOU	待定
12:10-12:40	Jinguang TENG	Structural Engineering Innovations with Emerging Materials
12:40-14:00	Lunch	

Invited Lectures and Session Lectures

Thursday Oct 25, 2018			
Thursday Oct 25	Session1	Session2	Session3
	Structural system and design theories Chairs: Yaozhi LUO & Yuyin WANG Secretary: Yutian BI 15356154980	Theories and methods of structural performance analysis Chairs: Shilang XU & Tiejun LIU Secretary: Congdi YU 15700083037	Disaster prevention and mitigation, protection of infrastructures Chairs: Guoqiang LI & Xinzheng LU Secretary: Chaofan HU 18868105009
14:00-14:20	<i>(Invited)</i> Yaozhi LUO, Finite Particle Method for the Analysis of Structural Complex Behaviors	<i>(Invited)</i> Shilang XU, Toughness Concrete	<i>(Invited)</i> Guoqiang LI, Development of Structural Metal Dampers for Seismic Disaster Mitigation of Buildings
14:20-14:35	Qianqian YU, Theoretical study on bond behavior between CFRP and steel	Lei ZHU, The effect of chord length and boundary condition on axial loading capacity of CHST-joints reinforced by external stiffeners	Bingqing DONG, Seismic Behavior of a New Connection for Precast Structures under Reverse Cyclic Loading
14:35-14:50	Liangjiu JIA, Development of Shear Buckling-Restrained Braces	Yuchen TAO, Elasto-Plastic Nonlinear Analysis Method for Spatial Frame Based on Rigid Body Rule	Zhaohui CHEN, Research on DAF due to Cable Rupture of Cable
14:50-15:05	Yuan GAO, A new type of H-section buckling-restrained brace	Jialiang ZHANG, Examining flexural behavior and deformation of steel-bamboo composite slabs	Xinzheng LU, The nonlinear time-history analysis of a city and seismic loss prediction: methodology and engineering application
15:05-15:20	Zhenyu HUANG, Mechanical and functional properties of novel floatable lightweight strain hardening cement composite	Debo ZHAO, Numerical simulation of reinforced concrete beams under impact	Qinghe FANG, Oblique wave action on coastal bridge superstructures
15:20-15:35	Yifan LIU, Trees As Natural Metamaterials	Shuo MA, numerical form-finding of generalized tensegrity structures	Rui Liu, Calculation of noise from a simply supported steel-concrete composite box beam subjected to train impacts
15:35-16:05	Coffee break		

Thursday Oct 25	Session 4 Reliability and durability of structures Chairs: Genda CHEN & Wenli CHEN Secretary: Songsong LIAN 15700079023	Session 5 Advanced structural experimental techniques Chairs: Zhongxian LI & Bin WU Secretary: Hongming YU 15700081495	Session 6 Wind engineering Chairs: Qingshan YANG & Kaiming BI Secretary: Honghong ZHANG 18868126838
14:00-14:20	<i>(Invited)</i> Genda CHEN, High Performance Bridges with Sustained Materials, Automated Preservation, and Informed Decision: a Life-cycle Perspective	<i>(Invited)</i> Zhongxian LI, Progress on Development of Underwater Earthquake Simulation Shaking Table Array	<i>(Invited)</i> Qingshan YANG, Recommendations in the Chinese Professional Standard for Wind Loads on Roof Structures
14:20-14:35	Aijun CHEN, BFRP 筋增强胶合木梁受力性能试验研究	Guo LI, Nagative effect improvement of steam autoclave curing on concrete later age strength	Kaiming BI, Performance and vibration control of offshore wind turbine subjected to multi-hazards
14:35-14:50	Xiaowen ZHANG, A discussion of the relationship between corrosion product-filled paste and a corrosion layer at the steel/concrete interface	Feng LIN, A Retrofit Method to Improve Progressive Collapse Resistance of RC Beam-Steel Sub assemblages	Jianshuo WANG, Numerical simulation and wind tunnel test of snowfall process on a stepped flat roof
14:50-15:05	Jun HE, A Sparse Grid Stochastic Collocation Method for Structural Reliability Analysis	Zhuxuan LI, Experimental Study on Grouted Connection Segment Specimens for Large Diameter Monopiles	Jinxin CAO, Gust response factor for a super-large cooling tower exposed to tornado-like vortices
15:05-15:20	Qingfeng LIU, Prediction of Electrochemical Rehabilitation for ASR and Chloride Affected Concrete Structures: A “double-multi” Model	Donghui YANG, field data analysis of time variant of structural displacement of cable stayed bridge under thermal effects	Qing WANG, Extreme wind speed estimation in mixed wind climates for southeast coastal regions of China
15:20-15:35	Qingling MENG, Numerical prediction of long-term deformation for bridges considering basic creep, cyclic loads and material degradation	Dan XU, Studies of the Floor Response Spectra Reappearance Technology of Nonstructural Component Shaking Table Testing	Fengli YANG / Hongjie ZHANG, Modal Parameters Identification on a 85.5m-high Lattice Transmission Tower based on Field-test Wind-induced Responses
15:35-16:05	Coffee break		

Thursday Oct 25	Session 7 Theories and methods of structural performance analysis Chairs: Yong BAI & Yongfeng DU Secretary: Tianyu BI 15356154980	Session 8 Theories and methods of structural performance analysis Chairs: Chengqing WU & Jianbing CHEN Secretary: Congdi YU 15700083037	Session 9 Disaster prevention and mitigation, protection of infrastructures Chairs: Han-Ping Hong & Changhai ZHAI Secretary: Chaofan HU 18868105009
16:05-16:25	<i>(Invited)</i> Yong BAI Flexible Composite Pipes-Design & Structural Analysis	<i>(Invited)</i> Chengqing WU, Cement-based and Geopolymer-based Ultra-High Performance Concrete under High Rate Loading	<i>(Invited)</i> Han-Ping Hong, Tower and Tower-line System Subjected to Wind Loading and Their Reliability Evaluation
16:25-16:40	Yongfeng DU, Progressive collapse of isolated structures subjected to multi-directional dynamic excitation	Jianbing CHEN, Shake table test study of two 9-story shear wall models	Changhai ZHAI, 核电厂抗震研究进展
16:40-16:55	Chenyong ZHANG, Introduction to AIR and CAT Modeling	Lei WANG, Finite element analysis for bond behavior between tendons and grout	Chaolie NING, Analytical Vulnerability Analysis of Non-Seismically Structures and Its Application to Seismic Risk Evaluation of National Building Inventory
16:55-17:10	Yun ZHOU, Experimental Research on Progressive Collapse Resistance of Fully Assembled Precast Concrete Frame Sub-structures	Hongmei ZHANG, Vector form based element development	Wei HOU, Seismic performance of Steel Plate Reinforced High Toughness Concrete Coupling Beams with Different Plate Ratios
17:10-17:25	Li XU, Seismic behavior of precast columns with grouted sleeve connections under reversed cyclic loading	Jingran HE, A Shake table test study of 2 9-story shear wall models	Zhong REN, An experimental investigation into post-fire mechanical properties of cold-formed steel
17:25-17:40	Xiaohui YU, After shock effects on seismic fragility results: a RC frame case	Fei XU, Structural performance of longitudinal plate to concrete-filled CHS connections under in-plane bending	Bo WEN, High Temperature Performance Research on Damaged Reinforced Concrete Columns under Post-Earthquake Fire
17:40-17:55	Chen ZHANG/ Xuan GUO Seismic Fragility Analysis of Shallow Foundation Supported Bridge System under Mainshock and Aftershock Loads	Haifeng SHI, Effect of anchorage system on the premature debonding failure of CFRP strengthened RC member	Ee Loon Tan, Numerical Study on Innovative Demountable Shear Connectors Subjected to Combined Shear and Axial Tension

Thursday Oct 25	Session 10 Reliability and durability of structures Chairs: Jianfei CHEN & Gang SHI Secretary: Songsong LIAN 15700079023	Session 11 Advanced structural experimental technique Chairs: Zhiwu YU & Ning LI Secretary: Hongming YU 15700081495	Session 12 Wind engineering Chairs: Jiming XIE & Zhongdong DUAN Secretary: Honghong ZHANG 18868126838
16:05-16:25	<i>(Invited)</i> Jianfei CHEN, FRP confined seawater and sea-sand concrete	<i>(Invited)</i> Zhiwu YU, 混凝土损伤本构关系研究及应用	<i>(Invited)</i> Jiming XIE (待定)
16:25-16:40	Gang SHI, Full Scale Test on the Seismic Performance of a Three-Story Completely Prefabricated Steel Frame	Ning LI, Development of Underwater Shaking Table Array: Linear Dynamic Testing, Analysis and Modeling	Zhongdong DUAN, Future Typhoon Hazards and Climate Change
16:40-16:55	Joaquim Mimusse Tchamo, Innovative and Advanced Techniques for Seismic Retrofitting	Zhiqiang WAN, Ensemble Prediction of Local Domain Dynamic Response of Physical System with Uncertain Parameters via Probabilistic Learning Method	Xinglong WANG, Wind Fragility Analysis of Low-rise Steel Structures Using by a Verified CFD Approach
16:55-17:10	Shunyi WANG, Experimental Investigation into Time-Variant Evolution of Local Scour around a Cylindrical Bridge Pier Embedded in Sand	Jun XU, An Efficient Method for Estimating Small Failure Probabilities of Structures under Non-stationary Seismic Excitations	Kaoshan DAI, Fragility Analysis of a Wind Turbine with Viscous Dampers with Scissor-Jack Brace
17:10-17:25	Fang YUAN, Concrete filled steel tubular (CFST) columns under cyclic load and acid rain attack: test simulation	Mario Aguaguña, Loading Protocols for Seismic Qualification of BRBs considering Global Performance Requirements	Wenli CHEN, Rain-wind induced vibrations of a stay cable
17:25-17:40	Lingxin ZHANG, Study on a Hybrid Method for Seismic Vulnerability Analysis of RC Frame Structures	Bin WU, 结构混合试验方法及其应用	Zenghui LIU, Simulation of 3-D Turbulence Wind Velocity Field Using the Double Proper Orthogonal Decomposition and Random Function Approach
17:40-17:55	Xiguang LIU , Depth profiles of concrete cover during natural carbonation	Baiyan ZHANG, Vision-Based Measurements for Aeroelastic Model Test of Typical Supertall Buildings	Chunjiang WANG, 索结构中的风致疲劳问题

Invited Lectures and Session Lectures

Friday Oct 26, 2018			
Friday Oct 26	Session 13 Green building and industrialization Chairs: Weiqing LIU Secretary: Hongming YU 15700081495	Session 14 Theories and methods of structural performance analysis Chairs: Bo WU & Zixiong GUO Secretary: Tianyu BI 15356154980	Session 15 Wind engineering Chairs: Qiusheng LI & Guoqing HUANG Secretary: Congdi YU 15700083037
8:30-8:50	<i>(Invited)</i> Weiqing LIU 现代木结构的研究与思考	<i>(Invited)</i> Bo WU, Mechanical properties of novel precast concrete structural members	<i>(Invited)</i> Qiusheng LI, Wind Profiles and Wind Effects on Skyscrapers during Windstorms
8:50-9:05	Jianjun YE, 钢筋混凝土结构绿色爆破拆除新技术	Xiaofeng WANG, Numerical study on the wrinkle-influencing factors of thin membranes	Guoqing HUANG, Field measurement of wind characteristics in a mountainous area of southwest China
9:05-9:20	Zhipeng ZHAI, Behavior and Numerical Model of Precast RC Shear wall with Bolt Connected	Xin REN, Creating innovative metamaterials and structures with negative Poisson's ratio	Tianyou TAO, Efficacy of Interpolation-Enhanced Scheme in the Simulation of Non-stationary Random Wind Field
9:20-9:35	Gu LI, Using Rock Dust as Paste Replacement to Produce Greener Concrete for Building	Liuchen MENG, Experimental study on global stability of welded Q460 steel beams	Yifan WANG, Three-dimensional typhoon wind fields along a transmission line based on WRF simulation
9:35-9:50	Bin SHI, Study on Mechanical Properties of Prefabricated Concrete Frame Beam with Efficient Reinforcement	Guoli LIANG, Experimental and numerical investigations on global stability of cellular beams	Kai LI, Fatigue reliability assessment of long-span steel-truss suspension bridges under the combined action of random traffic and wind loads
9:50-10:05	Haishan GUO, Research on a New Prestress Precast Efficient Fabricated Frame System	Hazem, Modelling of Inclined Semi-Elliptical Fatigue Cracks Along the Weld Toe of Tubular T-joints	Shangyu HU, Active wind gust tunnel simulation of wind pressure on field measured low rise buildings during typhoons
10:05-10:35	Coffee break		

Friday Oct 26	Session 16 Theories and methods of structural performance analysis Chairs: Xianglin GU & Jian GUO Secretary: Chaofan HU 18868105009	Session 17 Theories and methods of structural performance analysis Chairs: Feng FAN & Xian XU Secretary: Songsong LIAN 15700079023	Friday Oct 26	Session 18 SHM & Artificial Intelligence Chairs: Yong XIA & Weixin REN Secretary: Honghong ZHANG 18868126838
8:30-8:50	<i>(Invited)</i> Xianglin GU, Time-dependent reliability analysis of corroded reinforced concrete beams considering non-uniform corrosion of steel bars	<i>(Invited)</i> Feng FAN, Structural Performance of Latticed Shells with Semi-rigid Joints	8:30-8:50	<i>(Invited)</i> Yong XIA, Sparse Recovery and Sparse Bayesian Learning for Structural Damage Detection
8:50-9:05	Jun HE, A Sparse Grid Stochastic Collocation Method for Structural Reliability Analysis	Gang SHI, Experimental Study of Flange-Plate Beam-to-Column Joints in High Strength Steel Frames	8:50-9:10	<i>(Invited)</i> Weixin REN, Non-stationarity of Operational Measurements in Structural Health Monitoring
9:05-9:20	Qingfeng LIU, Prediction of Electrochemical Rehabilitation for ASR and Chloride Affected Concrete Structures: A “double-multi” Model	Yao CHEN, Improved Form-Finding of Tensegrity Structures using Blocks of Symmetry-Adapted Force Density Matrix	9:10-9:25	Ning ZHAO, Fast computation of structural response under non stationary seismic excitations
9:20-9:35	Yafei MA, Corrosion Fatigue Life Model for Existing Reinforced Concrete Bridges	Zhanfei WANG, Effect of leaning angle on seismic performance of half-through steel box basket-type arch bridges under transverse motions	9:25-9:40	Pengcheng WANG, 步行荷载两阶段识别
9:35-9:50	Jian GUO, 复杂海域环境下跨海桥梁关键构件服役性能的试验研究	Qinghua ZHU, Dynamic Mechanical Property of Reinforcing Steel Bars at Different Strain Rates: A Molecular Dynamics Study	9:40-9:55	(Leon) Yang LI, 结构活荷载研究的大数据方法论
9:50-10:05	Dongtao XIA, Experimental studies on flexural toughness of hybrid fiber reinforced concrete	Yuanzhi LIANG, Inertia Effect on the Dynamic Strength of Calcium Silicate Hydrate at Nano-Scale: a Molecular Dynamics Study	9:55-10:10	Tinghua YI, State of the art evaluation of sensor placement for structural health monitoring
10:05-10:35	Coffee break		10:10-10:35	Coffee break

Friday Oct 26	Session 19 Advanced structural experimental techniques Chairs: Xiuli DU & Shishun ZHANG Secretary: Hongming YU 15700081495	Session 20 Theories and methods of structural performance analysis Chairs: Qin FANG Secretary: Tianyu BI 15356154980	Session 21 Theories and methods of structural performance analysis Chairs: Weiliang JIN & Cheng CHEN Secretary: Congdi YU 15700083037
10:35-10:55	<i>(Invited)</i> Xiuli DU, (待定)	<i>(Invited)</i> Qin FANG, 冲击爆炸荷载作用下混凝土结构的数值模拟	<i>(Invited)</i> Weiliang JIN, The Life-Cycle Analysis & Design of Concrete Structures and its Application
10:55-11:10	Zuowu YIN, 基于分子动力学的混凝土力学性能从纳观到宏观的模拟方法	Xiaoling TAN, 亚临界雷诺数下四圆柱绕流特性研究	Weihua HU, Strain-based operational modal analysis and its application to bridge
11:10-11:25	Yichao GAO, Integrated Optimization of Vibration Control System for Civil Structures under Random Ground Motion Using Improved Genetic Algorithms	Wanqing LV, Bond Strength Between Steel and Recycled Aggregate Concrete (RAC) in RAC-Filled Steel Tubes	Yu ZENG, Service life analysis of PC structures exposed to marine environment
11:25-11:40	Hui CHEN, Statistical model updating method and result verification based on HP-G method	Zhifeng WU, A statistical model updating method of beam structures with random parameters under static load	Shisheng WANG, Design and analysis on TTR of TLP
11:40-11:55	Zuquan JIN, Application of Steel Ring Outer Strain to Test Steel Reinforcement Stress	Heng ZHANG, Homotopy-series solution of eigenpairs of random structures	Yanan GAO, A New Model for Crowd-induced Lateral Vibration of footbridge

Friday Oct 26	Session 22 Theories and methods of structural performance analysis Chairs: Jihong YE Secretary: Chaofan HU 18868105009	Session 23 Theories and methods of structural performance analysis Chairs: Gang WU & Qinghua LI Secretary: Songsong LIAN 15700079023	Session 24 SHM & Artificial Intelligence Chairs: Hui LI & Yu LING Secretary: Honghong ZHANG 18868126838
10:35- 10:55	<i>(Invited)</i> Jihong YE, Fire test and numerical simulation investigation of mid-rise cold-formed steel composite shear wall structures	<i>(Invited)</i> Gang WU, Dry Connected Precast Concrete Structures and Non-Emulative Cast-in-Place Design Theory	<i>(Invited)</i> Hui LI, 工程系统的智能流体动力学与流动控制
10:55- 11:10	Yaping GE, Mechanical performance and early hydration of graphene oxide-cement composites	Xin YU, Compressive Stress-Strain Relationship of Concrete Made with Steel Slag and Waste Glass	Yu LING, Sparse regularization-based structural damage identification using frequency response functions
11:10- 11:25	Daming LUO, Experimental study on influences of water-to-cement ratio and curing condition on oxygen transportation of concrete with internal curing	Youzhe YANG, Experimental investigation on post-punching mechanism of slab-column joints	Baohua SHAN, Monitoring of bond—slip for CFRP-concrete interface using the stereo vision method
11:25- 11:40	Dapeng ZHANG, The Impact Dynamic Analysis of Suspended Marine Cables	Qiong TANG, Linear static analysis for evaluating progressive collapse risk of flat-plate structures	Tianzhi LI, Fault detection and identification between structure and sensors based on particle filter algorithm
11:40- 11:55	Chengyin LIU, Bridge damage detection based on Weigh-in-Motion Technology	Rui ZHANG, Structural Behavior of RC Bridge Columns with PP-ECC Jackets in the Region of Plastic Hinge under the Unilateral Cyclic Loadings	Yuanfeng DUAN, Elasto-Magneto-Electric (EME) Steel Stress Monitoring Instrument for Steel Cables and Tendons: Research, Application, and Standard

Friday Oct 26	Session 25 Heritage building performance and assessment Chairs: Xinqun ZHU & Dongming YAN Secretary: Hongming YU 15700081495	Session 26 Theories and methods of structural performance analysis Chairs: Guowei MA & Xiaodong JI Secretary: Tianyu BI 15356154980	Session 27 Disaster prevention and mitigation, protection of infrastructures Chairs: Chunsheng CAI & You DONG Secretary: Congdi YU 15700083037
14:00-14:20	<i>(Invited)</i> Xinqun ZHU, Condition Assessment of Highway Bridges under Traffic Loadings	<i>(Invited)</i> Guowei MA, 混凝土 3D 打印研究现状和展望	<i>(Invited)</i> Chunsheng CAI, Performance investigation of low-rise buildings under hurricane wind loading
14:20-14:35	Zhazhan TANG, Post-fire Load-bearing Capacity Assessment of Steel Bridges	Xiaodong JI, Coupled Axial Tension-Shear Behavior of Reinforced Concrete Walls	You DONG, Reliability-, Performance-, and Resilience-Informed Design and Assessment of Reinforced Concrete Structures Under Multiple Hazards
14:35-14:50	Tao WEI, Post-fire Load-bearing Capacity Assessment of Steel Bridges	Hui CHEN, Statistical model updating method and result verification based on HP-G method	Kun TIAN, The influence of vertical ground motion on dynamical response for curved surface isolated structure
14:50-15:05	Xin SHI, Seismic evaluation of self-centering concrete frames subjected to near-fault earthquakes	Xinger WANG, Dynamic response and failure characteristics of laminated glass under multiple impacts	Xiang DONG, Shear Behavior of Steel Fiber Reinforced Concrete Coupling Beams for Shear Wall Structure
15:05-15:20	Shengqi WANG, Comparison of aeroelastic instability of a suspension footbridge with two configurations	Jian YANG, Study on progressive collapse performance of steel frame with sheathed light-gauge steel stud frame infill walls under column-removal scenario	Lingxin ZHANG, Study on a Hybrid Method for Seismic Vulnerability Analysis of RC Frame Structures
15:20-15:35	Jianming YIN, Innovative Products and Services for Catastrophic Risk Quantification and Management in China	Xiao LAI, Free Vibration of Buildings with Non-uniform Stiffness through Coupled Flexural and Shear Beams	Zhiyu XIE, Experimental Study on Fatigue Performance of Prefabricated Concrete T-shape Composite Beams
15:35-16:05	Coffee break		

Friday Oct 26	Session 28 Theories and methods of structural performance analysis Chairs: Jianzhuang XIAO & Xiaowei YE Secretary: Chaofan HU 18868105009	Friday Oct 26	Session 29 Disaster prevention and mitigation, protection of infrastructures Chairs: Yong LU & Guoxing LU Secretary: Songsong LIAN 15700079023	Session 30 SHM & Artificial Intelligence Chairs: Ying LEI & Jun TENG Secretary: Honghong ZHANG 18868126838
14:00-14:20	<i>(Invited)</i> Jianzhuang XIAO, Concept of composite concrete and its application	14:00-14:20	<i>(Invited)</i> Yong LU, Beam assemblies in a progressive collapse scenario: overview and some recent studies	<i>(Invited)</i> Ying LEI, Identification of Time-varying Structures by Integrated Wavelet Multiresolution Analysis and Kalman Filtering with Partial Measurements
14:20-14:35	Yin CHENG, An Open-Source Code for Assessing Seismic Hazard and Risk (CAESHAR) Based on Monte Carlo Simulation approach	14:20-14:40	<i>(Invited)</i> Guoxing LU, Recent Studies on Energy Absorption of Origami Patterned Structures	<i>(Invited)</i> Jun TENG, Technologies and Challenges of SHM for Solving the Engineering Problems
14:35-14:50	Guoyan WANG, Buckling analysis of a super large cooling tower considering geometrical and material nonlinearity	14:40-14:55	Dan GAN, Seismic behavior of square tubed-reinforced-concrete column to RC beam joints	Zheng LU, Comparative Vibration Control Performance of a Tuned Mass Damper and a Particle Damper on Various Structures
14:50-15:05	Hongsong HU, Axial compressive behavior of square CFST columns through direct measurement of load components	14:55-15:10	Hongtao LIU, Experimental study on seismic behavior of roof joint	Yongtao YUAN, Structural Health Monitoring of Reinforced Concrete Columns Subjected to Axial Loads Using Piezoceramic-based Sensors
15:05-15:20	Zhichao LAI, Analysis and Behavior of High-Strength Rectangular CFT Columns	15:10-15:25	Nawawi Chouw, Seismic behavior of clustered footings on liquefiable soil	Runzhou YOU, Construction Safety Monitoring System for Steel Structure of the Stadium Roof in Zhenzhou Olympic Sports Center
15:20-15:35	Licheng WANG, Seismic fragility analysis of RC chimney based on the IDA method	15:25-15:40	Qisheng WANG, Architectural Grid Generation for Free-form Surfaces Based on Spring-mass Model	Hong ZHENG, Structural damage identification under ambient vibrations using autoregressive coefficients
15:35-16:05	Coffee break	15:40-16:05	Coffee break	

Friday Oct 26	Session 31 Structural rehabilitation, retrofitting and strengthening Chairs: Xianyu JIN & Hongjun LIU Secretary: Hongming YU 15700081495	Session 32 Theories and methods of structural performance analysis Chairs: Hongping ZHU & Bin Xu Secretary: Tianyu BI 15356154980	Session 33 Theories and methods of structural performance analysis Chairs: Jiaping LIU & Longhe XU Secretary: Congdi YU 15700083037
16:05-16:25	<i>(Invited)</i> Hanbin GE, 高性能阻尼器的力学特性及在地上和地下结构中的减震机理与效能研究	<i>(Invited)</i> Hongping ZHU, Performance study of passive structural vibration systems based on monitoring data	<i>(Invited)</i> Jiaping LIU, Shrinkage and Cracking Mitigation Technologies for Modern Concrete
16:25-16:40	Tao CHEN, Fatigue behavior of CFRP repaired four point bend steel specimens	Jichao LI, Probability-based seismic performance assessment of a 220-kV substation	Longhe XU, Development and Experimental Verification of Hysteretic Analysis Model for Pre-Pressed Spring Self-Centering Energy Dissipation Braces
16:40-16:55	Lingzhen LI, Finite element analysis of fatigue performance of central inclined cracked steel plates repaired with CFRP	Qiaoyun WU, Dimensional Analysis of Pounding Response of SDOF Systems with the Modified Kelvin Impact Analytical Model	Yijia SUN, Flexural Behavior of Steel Fiber-Reinforced Lightweight Aggregate Concrete Beams Reinforced with Glass Fiber-Reinforced Polymer Bars
16:55-17:10	Ruoyu LIU, effect of material model on simulation of CFRP patched steel plates with a central crack	Junxian ZHAO, Buckling-restrained braced steel frame gusset connection performance based on sliding mechanism: Research progress	Hongfei CHANG, Compressive behavior of plate reinforced square hollow section T-joints
17:10-17:25	Gao MA, Mechanical behavior of FRP-retrofitted damaged structure and seismic performance assessment	Ran LI, Visual observation and interpretation of synchronization of bouncing crowd	Basha Humayun Syed, Shear behavior of columns in masonry infilled RC frames under lateral loads
17:25-17:40	Wanyang GAO, Experimental Study on Fire Damaged RC Slabs Strengthened with Basalt Fabric-Reinforced Shotcrete	Zhihao WANG, Passive electromagnetic and eddy-current damper for Structural vibration control	Hongtao XIE/ Wangxi ZHANG, Serviceability Research on Prestressed Precast Concrete Frame Structures based on Capacity Spectrum Method

Friday Oct 26	Session 34 Theories and methods of structural performance analysis Chairs: Tong GUO & Yu CHEN Secretary: Chaofan HU 18868105009	Session 35 Theories and methods of structural performance analysis Chairs: Tinghua YI Secretary: Songsong LIAN 15700079023	Session 36 Disaster prevention and mitigation, protection of infrastructures Chairs: Yun ZHOU & Huanjun JIANG Secretary: Honghong ZHANG 18868126838
16:05-16:25	<i>(Invited)</i> Linhai HAN, Behaviour of recycled aggregate concrete (RAC)-filled steel tubular columns	<i>(Invited)</i> Tinghua YI, State-of-the-Art Evaluation Criteria of Sensor Placement for Structural Health Monitoring	<i>(Invited)</i> Yun ZHOU, Design of lead-filled steel tube damper and its mechanical properties Research
16:25-16:40	Tong GUO, Fatigue assessment of long-span steel bridges considering coupled action of complex load and environmental attack	Dianqi LIU, Finite Element Analysis Study on Flexural Behavior of Concrete -Filled Square Steel Tubes with Inner I-Shaped CFRP	Huanjun JIANG, Study of Earthquake Resilient Shear Wall with Replaceable Components
16:40-16:55	Hao ZHOU, 考虑柱偏心距随机特性的 RC 柱可靠度分析	Yuqi WANG, Numerical investigation on load-bearing capacity and ductility of mixed strength steel structure column	Tianchen HUANG/Yongbo PENG, Adaptive sliding base isolation systems for seismic protection
16:55-17:10	Yu CHEN, 方支管-H 型钢主管节点静力性能研究	Minsheng GUAN, Experimental investigation of high-strength manufactureds and concrete-filled steel tubes tub columns under axial compression	Hongtao LIU, Numerical Analysis of Seismic Behavior of Roof Joints with Loose Holes
17:10-17:25	Ruoqiang FENG, Lateral resistant performance of cold-formed steel framed shear walls with steel sheathing	Hongbing CHEN, Multi-scale Numerical Study on PZT-based Debonding Detection Mechanism for Rectangular CFST considering the Coupling Effect	Tianchen HUANG , Adaptive sliding base isolation systems for seismic protection
17:25-17:40	Yonggan TAI, Polynomial chaos expansion method for calculating statistical moments of structural dynamic characteristics	Tianli HUANG, Experimental Investigation on the Mechanical Properties of RC Beams Due to Longitudinal Reinforcement Corrosion	Weijin XU, Simulation of Seismic Catalog for Earthquake Catastrophe Model Based on the Monte Carlo Method

Keynotes

Saturday Oct 27, 2018

Keynote presentations

Chairs: Prof. C.B. YUN and Prof. Shilang XU

Secretary: Dawei ZHANG / 18357126199

8:30-9:00	Yanliang DU	关于推进我国交通基础设施重大工程结构长寿命安全保障战略的研究
9:00-9:30	Zhengqing CHEN	索支承桥的多阶涡振问题研究
9:30-10:00	B.F. SPENCER	Topology Optimization of Seismically Excited Structures
10:00-10:30	Coffee break	
Keynote presentations		
Chairs: Prof. B.F. SPENCER and Prof. Weiliang JIN		
Secretary: Dawei ZHANG / 18357126199		
10:30-11:00	Zhishen WU	Recoverability and Sustainability Enhancement of Structures with Advanced FRP Reinforcements
11:00-11:30	Yimin XIE	Application of Topology Optimization Technique to Structural Engineering
11:30-12:00	C.B. YUN	ICT Convergence to Civil Infrastructural Engineering
12:00-12:40	Discussion and Closing Ceremony	
12:40-14:00	Lunch	