

Overview of Symposium Programme

Friday, 24 May, 2024

Time	Event
14:00-21:00	Seminar registration (Venue: Hotel lobby)
18:00-20:00	Welcome reception

Saturday, 25 May, 2024

Time	Event				
	(Venue: Golden ballroom)				
08:30-09:00	Opening Session				
09:00-09:40	Keynote lecture 1				
09:40-10:00	Group Photo & Coffee Break				
10:00-10:40	Keynote lecture 2				
10:40-11:20	Keynote lecture 3				
11:20-12:00	Keynote lecture 4				
12:00-13:30	Lunch & Break (TianDi Restaurant, 1F)				
	Hui Zhi Hall	Ballroom A	Hui Xin Hall	Hui Xian Hall	Ballroom C
	Parallel Session A				
13:30-15:00	A1: Organized session 1 Nonlinear flutter analysis and control of long span bridges	A2: Flutter of bridges 1	A3: Vortex induced vibration 1	A4: Energy harvest based on flutter	A5: Aeroelasticity 1
15:00-15:20	Coffee Break				
	Parallel Session B				
15:20-17:20	B1: Organized session 2 Active control of wind- induced vibrations of structures	B2: Flutter of bridges 2	B3: Vortex induced vibration 2	B4: Other topics	B5: Aeroelasticity 2
18:00-20:00	Dinner (Golden ballroom, 2F)				

Sunday, 26 May, 2024

Time	Hui Zhi Hall	Ballroom A	Hui Xin Hall	Hui Xian Hall	Ballroom C
08:30-10:00	Parallel Session C				
	C1: Organized session 3 Nonlinear flutter performance evaluation	C2: Flutter of bridges 3	C3: Vortex induced vibration 3	C4: Unsteady aerodynamics 1	C5: Aeroelasticity 3
10:00-10:20	Coffee Break				
10:20-11:50	Parallel Session D				
	D1: Organized session 4 Modelling nonlinear flutter of bridges	D2: Vibration control	D3: Vortex induced vibration 4	D4: Unsteady aerodynamics 2	D5: Galloping of bluff bodies
11:50-13:30	Lunch & Break (TianDi Restaurant, 1F)				
13:30-14:10	Keynote lecture 5				
14:10-14:50	Keynote lecture 6				
14:50-15:30	Keynote lecture 7				
15:30-15:50	Coffee Break				
15:50-16:30	Keynote lecture 8				
16:30-17:00	Closing Session				

- Notes:
1. Each Keynote lecture takes 40min, including 35min presentation and 5min discussion;
 2. Each ordinary oral presentation takes 15min, including 12min presentation and 3min discussion;
 3. The screen format for PPT is 16:9.

25 May morning 09:00-12:00

09:00-09:40	<p>Keynote lecture 1: Flutter of long-span bridge: Fluid-structure interaction mechanism and machine-learning prediction model</p> <p>Hui Li College of Civil Engineering, Harbin Institute of Technology, China</p>
10:00-10:40	<p>Keynote lecture 2: Transitioning from physical aeroelastic wind tunnel testing to physical-numerical hybrid simulation: a paradigm shift</p> <p>Ho-Kyung Kim Dept. of Civil and Environmental Engineering, Seoul National University, Korea</p>
10:40-11:20	<p>Keynote lecture 3: JAXA's numerical and experimental activities on turbulent transonic buffet to realize the digitalization of the aircraft lifecycle and certification by analysis</p> <p>Andrea Sansica Japan Aerospace Exploration Agency, Chofu Aerospace Center, Japan</p>
11:20-12:00	<p>Keynote lecture 4: Does A_2^* Scanlan derivative still matter? Personal notes on the status and future perspectives of long-span bridge aeroelasticity</p> <p>Luca Caracoglia Northeastern University, USA</p>

25 May afternoon 13:30-15:00

Saturday, 25 May 2024 | 13:30-15:00 (UTC +8)

Parallel Session A, Hui Zhi Hall .

A1: Organized session 1 Nonlinear flutter analysis and control of long span bridges

Chairs:

Time	Title	Authors	Presenter
13:30-13:45	A0058: Theoretical and Experimental Study on Three Dimensional Nonlinear Flutter of Long Span Bridges	Han Yan; Li Kai; Song Jun; Qiu Zhixiong	Yan Han <i>Changsha University of Science and Technology</i>
13:45-14:00	A0207: Nonlinear Flutter Characteristics of Super Long Span Truss Beam Suspension Bridge		Cunming Ma <i>Southwest Jiao Tong University</i>
14:00-14:15	A0208: Identification of nonlinear aerodynamic damping using an iterative unscented Kalman filter-based approach		Mingjie Zhang <i>Dalian University of Technology</i>
14:15-14:30	A0209: Effect of Structural Damping Nonlinearity on Post-flutter Behavior of Bluff bodies		Chaoqun Wang <i>Hunan University</i>
14:30-14:45	A0210: Wind Tunnel Test on Bridge Flutter Control Performance by using Underwater Heaving Devices		Wanbo An <i>Dalian University of Technology</i>
14:45-15:00	A0068: Tuned mass damper for Nonlinear flutter control: optimal design considering nonlinear effect	Zhixiong Qiu, Kai Li, Yan Han	Zhixiong Qiu <i>Changsha University of Science and Technology</i>

Parallel Session A, Ballroom A.

A2: Flutter of bridges 1

Chairs:

Time	Title	Authors	Presenter
13:30-13:45	A0010: Local and global optimum in aero-structural optimization of long-span bridges considering flutter constraint	Santiago Hernandez, Miguel Cid Montoya, Jose Angel Jurado	Santiago Hernandez <i>University of Coruna</i>
13:45-14:00	A0016: Effects of downward vertical stabilizers on nonlinear flutter evolution of closed-box girders bridges with various aspect ratios	Rui Zhou, Dong Xiao, Yongxin Yang	Rui Zhou <i>Shenzhen University</i>
14:00-14:15	A0017: The effect of geometric details on the "nose-up effect" in twin-box bridge deck flutter	Maja Rønne, Allan Larsen, Jens H. Walther, Tomasso Argentini	Maja Rønne <i>COWI</i>
14:15-14:30	A0030: Energy-related mechanism in nonlinear bending-torsional coupled flutter and its aerodynamic control of a long span bridge by active flaps	Lin Zhao, Yaojun Ge	Lin Zhao <i>Tongji University</i>
14:30-14:45	A0056: Effect of longitudinal modal coupling on flutter and decoupling method	Cao Yiwen, Huang Zhiwen	Cao Yiwen <i>Hunan university</i>
14:45-15:00	A0061: Study on Mode Competition Phenomenon of Nonlinear Flutter of Bridge Based on the Full Aeroelastic Model Test	Song Jun, Li Kai, Han Yan	Song Jun <i>Changsha University of Science & Technology</i>

Parallel Session A, Hui Xin Hall.

A3: Vortex induced vibration 1

Chairs:

Time	Title	Authors	Presenter
13:30-13:45	A0013: Flap stabilizing mechanism for vortex-induced vibration of bridge box girder	Hiroshi Katsuchi, Jiaqi Wang, Tam Phan Duc	Hiroshi Katsuchi <i>Yokohama National University</i>
13:45-14:00	A0019: Experimental method for prediction of vortex amplitude and locking interval for different damping cases based on amplitude variation parameters	Kai Qie, Zhitian Zhang, Yuanyuan Wang	Kai Qie <i>Hunan University</i>
14:00-14:15	A0023: Nonlinear Vortex-induced Load Modeling and Multi-mode Full Bridge VIV Responses	Zhitian Zhang, Kai Qie, Zhen Wang	Zhitian Zhang <i>Hainan University</i>
14:15-14:30	A0025: Numerical simulation of vortex-induced vibrations of flexible cylinder	Yuqi Wang, Zhanbiao Zhang, Fuyou Xu	Yuqi Wang <i>Dalian University of Technology</i>
14:30-14:45	A0027: Multi-mode vortex-induced vibration of a long-span bridge under non-uniform flows	Siwen Sun, Wen-Li Chen, Wenhan Yang	Siwen Sun <i>Harbin Institute of Technology</i>
14:45-15:00	A0029: Control of vortex-induced vibration of a single bridge girder by using active wake slit jets	Guan-bin Chen, Wen-Li Chen, Dong-lai Gao	Guanbin Chen <i>Harbin institute of technology</i>

Saturday, 25 May 2024 | 13:30-15:00 (UTC +8)

Parallel Session A, Hui Xian Hall.

A4: Energy harvest based on flutter

Chairs:

Time	Title	Authors	Presenter
13:30-13:45	A0012: Studying the Performance of a Torsional-Flutter Harvester by Navier-Stokes Simulations: Preliminary Results	Yuhui Qin, Luca Caracoglia	Yuhui Qin <i>Northeastern University</i>
13:45-14:00	A0011: Enhancing Output Power of a Torsional-Flutter Harvester in Turbulent Winds by Stochastic Simulations	Luca Caracoglia	Luca Caracoglia <i>Northeastern University</i>
14:00-14:15	A0057: A novel electromagnetic energy harvester with parallel elastic strips for harvesting wind energy	BO SU, Jiangming Hao	Bo SU <i>Jiangsu University</i>
14:15-14:30	A0099: Performance of Flow-induced Vibrational Power Generator by a Cantilevered Circular Cylinder with a Splitter Plate and Its Flow Visualization	Sotaro Takeuchi, Takahiro Kiwata, Takuma Shima, Toshiyuki Ueno	Takahiro Kiwata <i>Kanazawa University</i>
14:30-14:45			
14:45-15:00			

Parallel Session A, Ballroom C.

A5: Aeroelasticity 1

Chairs:

Time	Title	Authors	Presenter
13:30-13:45	A0014: Resolvent analysis for flexible wing response to optimal gusts	Herman Mak, Olivier Marquet, Lutz Lesshafft	Herman Mak <i>ONERA</i>
13:45-14:00	A0119: The Study on the Parameter Sensitivity and Modal Participation of the AGARD445.6 Wing	Zihao Dou	Zihao Dou <i>Northwestern Polytechnical University</i>
14:00-14:15	A0059: Application and practical guidelines of dynamic mode decomposition (DMD)-based Koopman theory in flutter and wind engineering	Cruz Y. Li, Daniel Ziyue Peng, Yunfei Fu, Xisheng Lin	Daniel Ziyue Peng <i>The Hong Kong University of Science and Technology</i>
14:15-14:30	A0060: The linear-time-invariance notion to the Koopman analysis: fluid–structure association and phenomenological analysis of the prism wake	Cruz Y. Li, Yunfei Fu, Xisheng Lin, Daniel Ziyue Peng	Cruz Y. Li <i>The Hong Kong University of Science and Technology</i>
14:30-14:45	A0084: Estimation of nonlinear wind-induced responses of membrane structures under fluid-structure interaction and geometric nonlinearity effect	Tengfei Wang, Neptune Yu, Qingshan Yang, Kunpeng Guo	Tengfei Wang <i>Arup</i>
14:45-15:00	A0201: FSI Flutter Modelling Using Flow Vision-Abaqus Co-simulation	Aksenov Andrey, Ovsyannikova Elena, Azarov Anatoly, Yintao Wei	Aksenov Andrey <i>TESIS engineering company</i>

25 May afternoon 15:20-17:20

Saturday, 25 May 2024 | 15:20-17:20 (UTC +8)

Parallel Session B, Hui Zhi Hall .

B1: Organized session 2, active control of wind-induced vibrations of structures

Chairs:

Time	Title	Authors	Presenter
15:20-15:35	A0072: Active control of bridge deck flutter using a receptance-based H2-optimal control method	Xiaojun Wei, Ran Xia	Xiaojun Wei <i>Central South University</i>
15:35-15:50	A0062: Flutter control of active aerodynamic flaps under complex incoming flow	Zilong Wang, Lin Zhao, Ke Li, Yaojun Ge	Zilong Wang <i>Tongji University</i>
15:50-16:05	A0064: The Active Flutter Control of Bridge-flap System Considering Aerodynamic Interference in Practice	Ke Li	Ke Li <i>Chongqin University</i>
16:05-16:20	A0132: Active mass damper control of the vortex-induced vibration in bridge decks	Jun Dai, Pan-Pan Gai, Xiao Yan, Zhao-Dong Xu	Jun Dai <i>Southeast University</i>
16:20-16:35	A0133: Intelligent Active Flow Control of Long-Span Bridge Deck using Deep Reinforcement Learning	Deng Xiaolong, Hu Gang	Xiaolong Deng <i>Harbin Institute of Technology (Shenzhen)</i>
16:35-16:50	A0100: Sensitivity-aided active control of flow past twin cylinders	Qingchi Zhu, Lei Zhou	Qingchi Zhu <i>Northeast Forestry University</i>
16:50-17:05	A0211: Active control of soft-flutter of a long-span bridge based on TMD	Qi Wang, Shaopeng Yang, Lin Huang	Qi Wang <i>Southwest Jiaotong University</i>

Parallel Session B, Ballroom A.

B2: Flutter of bridges 2

Chairs:

Time	Title	Authors	Presenter
15:20-15:35	A0065: Flutter stability of three-tower suspension bridges under skew wind	Xinjun Zhang	Xinjun Zhang <i>Zhejiang University of Technology</i>
15:35-15:50	A0066: Nonlinear Aerodynamic Damping and Flutter Derivatives of a Double-deck Truss Girder	Haohong Li, Qingshan Yang, Liangliang Zhang, Kunpeng Guo	Haohong Li <i>Chongqing University</i>
15:50-16:05	A0071: Effect and mechanism of spatial crossed hangers on flutter performance of Double-Main-Span (DMS) suspension bridges	Haojun Xu, Yongxin Yang, Jinbo Zhu, Shipeng Gao	Haojun Xu <i>Tongji University</i>
16:05-16:20	A0077: Flutter stability performance of suspension bridge in asymmetric deck erection scheme	Jinjie Zhang, Yongxin Yang	Jinjie Zhang <i>Tongji University</i>
16:20-16:35	A0080: Torsional Modal Parameters Identification of Truss Suspension Bridge with Four Main Cables	Yizhe Lan, Yaojun Ge, Jinjie Zhang, Yongxin Yang	Yizhe Lan <i>Tongji University</i>
16:35-16:50	A0081: Neural Network Model for Flutter Derivative Identification of Flat Box Girders and Flutter Characteristics of Long-span Suspension Bridges	Lianhuo Wu, Yongle Li, Mingjin Zhang	Lianhuo Wu <i>Southwest Jiaotong University</i>
16:50-17:05	A0107: Wind-induced hazards and risk evaluation for long-span bridges: A case study of a cable-stayed bridge in Korea	Hyeong-Yun Cheon, Sejin Kim, Ho-Kyung Kim	Hyeong-Yun Cheon <i>Seoul national University</i>
17:05-17:20	A0114: Research on the wind-induced vibration of a long-span bridge in complex terrain based on field measurement	Chen Qian, Yu Chuanjin, Li Yongle	Chen Qian <i>Southwest Jiaotong University</i>

Saturday, 25 May 2024 | 15:20-17:20 (UTC +8)

Parallel Session B, Hui Xin Hall.

B3: Vortex induced vibration 2

Chairs:

Time	Title	Authors	Presenter
15:20-15:35	A0036: Nonlinear self-excited forces of a twin-box bridge deck in vortex-induced vibration and flutter under smooth and turbulence flows	Hongsheng Jiang, Xinzhong Chen, Shaopeng Li	Hongsheng Jiang <i>Chongqing University</i>
15:35-15:50	A0038: Study on the vortex-induced vibration and aerodynamic force of the wavy cylinder	Qingkuan Liu, Yifei Sun, Binxuan Wang, Kaiwen Li	Qingkuan Liu <i>Shijiazhuang Tiedao University</i>
15:50-16:05	A0041: The Mechanism of VIV of 1:5 Rectangular Cylinder based on Flow Structure Analysis	Shujin Laima, Geng Xue, Hui Li	Shujin Laima <i>Harbin Institute of Technology</i>
16:05-16:20	A0042: Influence of corrosion on vortex-excited vibrations of oceanic risers	Liu Hui, Liu Rong, Ji Baifeng, Wang Xueliang	Hui Liu <i>Wuhan University of Technology</i>
16:20-16:35	A0045: A digital twin for vortex-induced vibration of a bridge deck section	Hao-Yang Li, You-Lin Xu, Le-Dong Zhu, Xiao-Liang Meng	Haoyang Li <i>Southwest Jiaotong University</i>
16:35-16:50	A0046: A digital twin for vortex-induced vibration of an in-service long suspension bridge	Guo-Qing Zhang, You-Lin Xu, Dan-Hui Dan, Qing Zhu	Guoqing Zhang <i>Southwest Jiaotong University</i>
16:50-17:05	A0078: Analysis of Aeolian Vibration of Large Span Relaxed Antenna Network Based on Finite Particle Method	Qin Kai, Zhao Fan, Fang Bin, Nie Jinkun	Qin Kai <i>Beijing Institute of Architectural Design</i>
17:05-17:20	A0088: Simplified-vortex model and its application in wind-induced vibrations of bridge girders	Chuanxin Hu, Lin Zhao, Yaojun Ge	Chuanxin Hu <i>Wuhan University of Science and Technology</i>

Parallel Session B, Hui Xian Hall.

B4: Other topics

Chairs:

Time	Title	Authors	Presenter
15:20-15:35	A0073: Fluid-solid Interactions in Bio-inspired Swimming of Fishing Lures from Underwater Videos	Xiaomeng Ge, Jiaming Xu	Xiaomeng Ge <i>The Structural Engineering Group</i>
15:35-15:50	A0126: Fluid-Structural interactions between flexible walls and shock train flow in isolators	Xianznong Meng, Junlei Wang	Xianznong Meng <i>Zhengzhou University</i>
15:50-16:05	A0116: Investigation of Take-off Process for Biomimetic Bird-Inspired Flying Vehicles base on Deep Reinforcement Learning	Liu JiaYuan, Xue Dong, Zhu ZiWen	Liu JiaYuan Northwestern Polytechnical University
16:05-16:20	A0115: Simulation analysis of aeroelastic of wind turbine blade under shutdown condition	Rongxiang Liu	Rongxiang Liu <i>Northwestern Polytechnical University</i>
16:20-16:35	A0021: Experimental study on aeroelastic response of wind turbine blades under extreme wind conditions	Xiangjun Wang	Xiangjun Wang <i>Yangzhou university</i>
16:35-16:50	A0206: Understanding of Effects of Terrain and Land Covers on Tornadoic Winds at Low Boundary Using a Coupled CM1 and CFD model	Jiamin Dang, Jana Houser, Leigh Orf, Grace Yan	Jiamin Dang <i>Missouri University of Science and Technology</i>
16:50-17:05	A0028: Isogeometric Sampling Method of Wind Spectrum and Wind-Induced Responses Considering the Time-Varying Characteristics of Loading Points	Xing Fu, Xing-Heng Zhang	Xing Fu <i>Dalian University of Technology</i>
17:05-17:20	A0135: Wind Induced Dynamic Response of Recessed Balcony Facades	Matthew Glanville, John Holmes	Matthew Glanville <i>CPP Wind Engineering</i>

Parallel Session B, Ballroom C.

B5: Aeroelasticity 2

Chairs:

Time	Title	Authors	Presenter
15:20-15:35	A0098: Body Freedom Flutter Analysis based on Reduced Order Model	Chao An, Rui Zhao, Changchuan Xie	Chao An <i>Beihang University</i>
15:35-15:50	A0118: New Viewpoint on the Mechanism of Laminar Separation Flutter	Zhen Lyu, Weiwei Zhang	Zhen Lyu <i>Shanghai Jiao Tong University</i>
15:50-16:05	A0122: Across-wind self-induced force on square cylinder in low turbulence uniform flow	Xinyi Yue, Qingshan Yang, Kunpeng Guo, Tianhang Wang	Xinyi Yue <i>Chongqing University</i>
16:05-16:20	A0125: Parameter-Varying Aeroelastic Modeling and analysis for a Variable-Sweep Wing using the Krylov Subspace method	Liqi Zhang, Yonghui Zhao	Liqi Zhang <i>Nanjing University of Aeronautics and Astronautics</i>
16:20-16:35	A0205: Aerodynamic interference between three separated box girders	Jiaqi Wang, Hiroshi Katsuchi	Jiaqi Wang <i>Yokohama National University</i>
16:35-16:50	A0020: Numerical Analysis of Dynamic Stability of Flutter Panels in Supersonic Flow	Jian Deng	Jian Deng <i>Lakehead University</i>
16:50-17:05	A0108: Unsteady Aerodynamic Force Modelling for Non-linear Time-History Response Analysis of Galloping on Four-Bundled Conductors	Hisato Matsumiya, Tomomi Yagi, John Macdonald	Hisato Matsumiya <i>Kyoto University</i>
17:05-17:20	A0095: Numerical simulation of Transformation of Panel Flutter at Low Supersonic Flow under External Disturbance	Anastasia Shishaeva, Vasily Vedeneev	Anastasia Shishaeva <i>Lomonosov Moscow State University</i>

26 May morning 08:30-10:00

Sunday, 26 May 2024 | 08:30-10:00 (UTC +8)

Parallel Session C, Hui Zhi Hall .

C1: Organized session 3, Nonlinear flutter performance evaluation

Chairs:

Time	Title	Authors	Presenter
08:30-08:45	A0111: Nonlinear flutter response of a suspension bridge under non-stationary strong winds	Haojun Tang, Yongle Li	Haojun Tang <i>Southwest Jiaotong University</i>
08:45-09:00	A0024: A Method for the Calculation of Multimode Coupled Nonlinear Flutter Response of Long Span Suspension Bridges	Bo Wu, Haili Liao, Huoming Shen	Bo Wu <i>Southwest Jiaotong University</i>
09:00-09:15	A0106: Application of optimized particle swarm algorithm in predicting the critical wind speed on flutter of bridge girders	Chuanjin Yu, Yongle Li	Chuanjin Yu <i>Southwest Jiaotong University</i>
09:15-09:30	A0070: Flutter Performance Prediction of Typical Bridge Section Based on Improved Neural Networks	Shipeng Gao, Yongxin Yang, Jinchang Bao	Shipeng Gao <i>Tongji University</i>
09:30-09:45	A0063: Fast Solution Method and Stability Evaluation of Bending-torsional Coupling Hysteresis Flutter of a Streamline Box Girder	Zhaohui Luo, Lin Zhao, Da Wang	Zhaohui Luo <i>Tongji University</i>
09:45-10:00			

Parallel Session C, Ballroom A.

C2: Flutter of bridges 3

Chairs:

Time	Title	Authors	Presenter
08:30-08:45	A0112: Nonlinear flutter performance of a suspension bridge during erection considering multimodal coupling effects	Zewen Wang	Zewen Wang <i>Southwest Jiaotong University</i>
08:45-09:00	Shape Optimization of Closed-Box Girder Considering Dynamic and Aerodynamic Effects on Flutter of Long-span Bridges: A CFD-enabled and Kriging Surrogate-based Strategy	Genshen Fang, Jie Zheng, Lin Zhao, Yaojun Ge	Genshen Fang <i>Tongji University</i>
09:00-09:15	A0093: Influence of Cable-Girder Anchorage Eccentricity on Flutter Performance of Long-Span Cable-Stayed Bridges	Xin Yan, Guangzhong Gao, Yanbo Sun, Jiawu Li	Xin Yan <i>Highway College, Chang'an University</i>
09:15-09:30	A0097: Parametric flutter instability of suspension bridges in turbulent flow	Niccolò Barni, Claudio Mannini	Niccolò Barni <i>University of Florence</i>
09:30-09:45	A0101: Three-dimensional flutter analysis of long-span bridges based on LES simulation	Fuyou Xu, Zhanbiao Zhang, Yuqi Wang	Fuyou Xu <i>Dalian University of Technology</i>
09:45-10:00	A0109: Numerical Calculation Study on Flutter Stability of Long Span Steel Box Beam Suspension Bridge	Hao Zhan	Hao Zhan <i>China Railway Major Bridge Reconnaissance & Design Institute Co., Ltd.</i>

Parallel Session C, Hui Xin Hall.

C3: Vortex induced vibration 3

Chairs:

Time	Title	Authors	Presenter
08:30-08:45	A0047: Vortex-induced Vibration Mechanism and Control of Semi-open Separated Twin-box Girders	Zhihao Lei, Xuhui He, Haiquan Jing	Zhihao Lei <i>Central South University</i>
08:45-09:00	A0050: Modelling of vortex-induced force and prediction of vortex-induced vibration of a bridge deck using method of multiple scales	Shengran Hao, Bin Wang, You-Lin Xu, Yongle Li	Shengran Hao <i>Southwest Jiaotong University</i>
09:00-09:15	A0055: Research on the effect of structural damping nonlinearity on vertical vortex-induced response of long-span bridges based on bridge deck section models	Wei-meng Ma, Zhi-wen Huang, Xu-gang Hua	Weimeng Ma <i>Hunan university</i>
09:15-09:30	A0079: Excitation source analysis of a subcritical prism wake using spectral proper orthogonal decomposition	Xisheng Lin, Yunfei Fu, Cruz Y. Li, Tim K.T. Tse	Xisheng Lin <i>Hong Kong University of Science and Technology</i>
09:30-09:45	A0083: Influence of Cross-section Shapes and Countermeasures on the Vortex-induced Vibration Performance of Semi-open Separated Twin-box Deck	JiaLi Wei, Ledong Zhu, Qing Zhu	JiaLi Wei <i>Tongji University</i>
09:45-10:00	A0129: Multi-parameter analysis of vortex-induced vibration of a long-span bridge based on long-term field monitoring data	Liutian Zhang, Wei Cui, Lin Zhao, Yaojun Ge	Liutian Zhang <i>Tongji university</i>

Parallel Session C, Hui Xian Hall.

C4: Unsteady aerodynamics 1

Chairs:

Time	Title	Authors	Presenter
08:30-08:45	A0034: The Unsteady Lift of An Oscillating Airfoil in Various Turbulent Flows	Yongfei Zhao, Mingshui Li	Mingshui Li <i>Southwest Jiaotong University</i>
08:45-09:00	A0049: Flow features identification of moving structures using a novel hybrid machine learning and randomized dynamic mode decomposition	Zengshun Chen, Likai Zhang, Tengda Guan	Zengshun Chen <i>Chongqing University</i>
09:00-09:15	A0067: Experimental investigation on cable vibration amplification based on an oscillating artificial rivulet	Chen Changlong, Chen Wen-Li, Gao Donglai, Chen Guanbin	Changlong Chen <i>Harbin Institute of Technology</i>
09:15-09:30	A0075: POD-DMD-DFT analysis for turbulent dominant flow field features on isolated buildings	Yunlong Wang, Yunfei Fu, Tim K.T. Tse, Cruz Y Li	Yunfei Fu <i>Liaoning Technical University</i>
09:30-09:45	A0082: Aerostatic and Aerodynamic Force of Streamlined Box Girders Based on Potential Flow Theory	Yongle Li	Yongle Li <i>Southwest Jiaotong University</i>
09:45-10:00	A0131: Probabilistic correlation modeling of multi-parameter random wind environment and its propagation in wind-induced response for a long-span bridge	Peng Liu, Wei Cui, Lin Zhao, Yaojun Ge	Peng Liu <i>Tongji University</i>

Parallel Session C, Ballroom C.

C5: Aeroelasticity 3

Chairs:

Time	Title	Authors	Presenter
08:30-08:45	A0202: Experimental study on coupled-mode flutter of a flexible wing at low Reynolds numbers	Amandolese Xavier, Stephan Cyrille	Amandolese Xavier <i>LMSSC, Conservatoire National des Arts et Métiers</i>
08:45-09:00	A0040: Influence of the structural damping coefficient on the critical speed of flat solar trackers.	Juan A. Cárdenas-Rondón ^o	Juan A. Cárdenas-Rondón^o <i>Universidad Politécnica de Madrid</i>
09:00-09:15	A0094: Vibration behavior of cable-supported photovoltaic module structure in uniform flow	Jingyao Li	Jingyao Li <i>Chongqing University</i>
09:15-09:30	A0076: Understanding of 3-DOF coupled flutter mechanism via explicit analytical solutions	Zuopeng Wen, Genshen Fang, Yaojun Ge	Zuopeng Wen <i>Tongji University</i>
09:30-09:45	A0137: Aeroelastic instability of cable supported photovoltaic system	Soon Duck Kwon, Tuan-Kiet La	Soon Duck Kwon <i>Jeonbuk National University</i>
09:45-10:00	A0203: How does static deflection influence the self-excited instability of solar trackers	Juan A. Cárdenas-Rondón, Jose Luis Ruiz-Moral, Carlos Rodríguez-Casado, et. al	Jose Luis Ruiz-Moral <i>Universidad Politécnica de Madrid</i>

26 May morning 10:20-11:50

Sunday, 26 May 2024 | 10:20-11:50 (UTC +8)

Parallel Session D, Hui Zhi Hall .

D1: Organized session 4, Modelling nonlinear flutter of bridges

Chairs:

Time	Title	Authors	Presenter
10:20-10:35	A0091: Recent advances in nonlinear time domain flutter theory of long-span bridges	Guangzhong Gao, ledong Zhu, Jiawu Li	Guangzhong Gao <i>Chang'an University</i>
10:35-10:50	A0117: Advancing Wind Tunnel Testing of Bridge Deck Models with Vertical Real-Time Aeroelastic Hybrid Simulation	Youchan Hwang, Jae-Hong Shim, Oh-Sung Kwon, Ho-Kyung Kim	Youchan Hwang <i>Institute of Construction and Environmental Engineering(ICEE), Seoul National University</i>
10:50-11:05	A0085: A New Type of Vertical-Torsion Coupled Large Amplitude Free Vibration Wind Tunnel Equipment and Flutter Experiment Results of Typical Bridge Section Models	Bishang Zhang, Ledong Zhu, Zicheng Li	Bishang Zhang <i>Tongji University</i>
11:05-11:20	A0032: Modeling of Nonlinear Coupled Flutter with Time-varying Wind-induced Static Deformation	Hao Sun	Hao Sun <i>Tongji University</i>
11:20-11:35	A0069: Nonlinear Flutter Prediction Method for Bridge Sections Based on the Instantaneous Power Balance Principle	Yue Cheng, Lin Zhao	Yue Cheng <i>Tongji University</i>
11:35-11:50			

Sunday, 26 May 2024 | 10:20-11:50 (UTC +8)

Parallel Session D, Ballroom A.

D2: Vibration control

Chairs:

Time	Title	Authors	Presenter
10:20-10:35	A0124: Suppression of Stall Flutter Using A Tuned Mass Damper	Yuting Li, Weiwei Zhang	Yuting Li <i>Northwestern Polytechnical University</i>
10:35-10:50	A0120: Galloping suppression with passive modal control	Fuqing Luo, Weiwei Zhang	Fuqing Luo <i>Northwestern Polytechnical University</i>
10:50-11:05	A0074: Mitigating wind suction of a flat roof using small horizontal-axis wind turbine	Haixin Jiang, Jiayu Li, Hongfu Zhang, Dabo Xin	Haixin Jiang <i>Hainan University</i>
11:05-11:20	A0037: Effects of O-rings on the aerodynamic forces and wind-induced vibrations of circular cylinders	Yifei Sun, Qingkuan Liu, Kaiwen Li, Zekai Chu	Yifei Sun <i>Shijiazhuang Tiedao University</i>
11:20-11:35	A0048: Active panel flutter control of composite plates with piezoelectric stiffener actuators	Kaihua Yuan, Zhichao Fu	Kaihua Yuan <i>Beijing Institute of Mechanical and Electrical Engineering</i>
11:35-11:50			

Parallel Session D, Hui Xin Hall.

D3: Vortex induced vibration 4

Chairs:

Time	Title	Authors	Presenter
10:20-10:35	A0090: Research on semi-active control of multi-mode vortex-induced vibration of ultra-long cable based on adaptive nonlinear sliding mode control	Xu Chen, Chunguang Li, Yan Han, Bangrong Yuan	Xu Chen <i>Changsha University of Science & Technology</i>
10:35-10:50	A0092: Modeling of vortex-induced force on tandem 5:1 rectangular cylinders	Wang Yusong	Yusong Wang <i>Tongji University</i>
10:50-11:05	A0096: Influence of Maintenance Rail on Vortex-Induced Vibration of Twin-Box Girder	Zhong-Xu Tan	Zhongxu Tan <i>Tongji University</i>
11:05-11:20	A0103: Effects of oscillation parameters on forced vibration for rectangular 5:1 cylinder	Pengcheng Zou, Shuyang Cao, Jinxin Cao	Pengcheng Zou <i>College of Civil Engineering of Tongji University</i>
11:20-11:35	A0104: A generalized Van der Pol-type aerodynamic damping model of the crosswind-excited flexible structures	Kunpeng Guo, Qingshan Yang	Kunpeng Guo <i>Chongqing University</i>
11:35-11:50	A0121: Closed-form solution of the of Hardening Non-Gaussian Cross-wind Response	Shuai Huang, Qingshan Yang, Kunpeng Guo	Shuai Huang <i>Chongqing University</i>

Parallel Session D, Hui Xian Hall.

D4: Unsteady aerodynamics 2

Chairs:

Time	Title	Authors	Presenter
10:20-10:35	A0128: Study on Optimization Design of Tilting Strategy with Reinforcement Learning Method	Chen Hao	Chen Hao <i>Xiamen University</i>
10:35-10:50	A0130: General and concise nonlinear aerodynamic force formula identification under different conditions by using machine learning algorithm	Wei Cui, Teng Ma, Lin Zhao	Wei Cui <i>Tongji University</i>
10:50-11:05	A0087: Discovering aerodynamic force equations using sparse Bayesian learning and symbolic regression	Jijiu Liu, Genshen Fang, Yaojun Ge	Jijiu Liu <i>Tongji University</i>
11:05-11:20	A0113: Experimental Investigation of Vortex-Induced Force Model for Bridge Deck	Jaehong Shim, Youchan Hwang, Ho-Kyung Kim	Jaehong Shim <i>Seoul National University</i>
11:20-11:35	A0086: Investigation of Vortex-Induced Force of a Centrally-Slotted Box Deck using CFD Simulation	Mohammed Elhassan Omer ELhassan, Ledong Zhu	Mohammed Elhassan Omer ELhassan <i>Tongji University</i>
11:35-11:50	A0043: A Wake Model Accounting for Unsteady Effects in High Aspect Ratio Wall-Mounted Cylinders	Zengshun Chen, Yemeng Xu, Haoxin Li	Zengshun Chen <i>Chongqing University</i>
11:50-12:05	A0134: Numerical investigation on the flutter derivatives of single-axis solar panels at large attack angles	Weilin Li, Guohang Yu, Huawei Niu, Xugang Hua	Weilin Li <i>Guangxi University</i>

Parallel Session D, Ballroom C.

D5: Galloping of cables and basic sections

Chairs:

Time	Title	Authors	Presenter
10:20-10:35	A0033: 3D Galloping of Multi-span Ice-accreted Boundled Conductors: Closed-form Solutions of the Initiation Conditions and Advanced Response Characterization	Xinzhong Chen, Yanchi Wu	Yanchi Wu <i>Chang'an University</i>
10:35-10:50	A0035: Dynamic behavior of transmission conductor under coupling action of wind-induced swing and ice shedding	Yuelong Zhang	Yuelong Zhang <i>Zhejiang University</i>
10:50-11:05	A0039: Characteristics of Pressure Distribution During Dry Inclined Cable Galloping	Kichiro Kimura, Kengo Yoshida, Hiroaki Nishimura, Katsutoshi Ohdo	Kichiro Kimura <i>Tokyo University of Science</i>
11:05-11:20	A0136: Mass ratio and afterbody effects in flow-induced vibrations of a 3:2 rectangular cylinder	Tommaso Massai, Jisheng Zhao, David Lo Jacono, John Sheridan	Tommaso Massai <i>University of Florence</i>
11:20-11:35	A0123: Galloping driving mechanism of a truss beam with solid barriers	Liyang Zhao, Chuanjin Yu, Yongle Li	Liyang Zhao <i>Southwest jiaotong university</i>
11:35-11:50			

26 May afternoon 13:30-15:00

13:30-14:10	<p>Keynote lecture 5: Energy-related mechanism in nonlinear bending-torsional coupled flutter and its aerodynamic control of a long span bridge by active flaps</p> <p>Lin Zhao Guangxi University, China</p>
14:10-14:50	<p>Keynote lecture 6: VIV galloping instability of slender bluff bodies: experimental evidence, mathematical modelling and physical interpretation</p> <p>Claudio Mannini Dept. of Civil and Environmental Engineering, University of Florence, Italy</p>
14:50-15:30	<p>Keynote lecture 7: Fluid-structure interaction in fish swimming</p> <p>Md. Mahbub Alam Center for Turbulence Control, Harbin Institute of Technology (Shenzhen), China</p>
15:50-16:30	<p>Investigation on the effects and mechanism of coupled aerodynamic and aeroelastic instability in long-span cable-stayed bridges</p> <p>Qing Zhu Tongji University, China</p>

End page