

MONDAY 28th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6	
Plenary Session	8:30 - 9:15	<b>Opening Session</b>							
Plenary Session	9:15 - 10:30	<b>Keynote Session A: Tracy Kijewski-Correa</b> 'Accelerating the disaster data to knowledge life cycle: case studies in the use of open data in recent hurricanes' Chair : Gregory Kopp							
Coffee Break	10:30 - 11:00								
Technical Sessions		<b>TS-02 (1) - Bluff body aerodynamics</b> Chair : Wen-Li Chen	<b>MS-01 (1) - THUNDERR (G. Solari Memorial session) (*)</b> Chair : Giuseppe Piccardo	<b>TS-08 (1) - High-rise buildings</b> Chair : Frank Kemper	<b>TS-10 (1) - Lattice towers and transmission lines</b> Chair : Ashraf El Damatty	<b>TS-09 (1) - Interference effects</b> Chair : Zhenqing Liu	<b>TS-23 (1) - Urban wind environment</b> Chair : Yoshihide Tominaga	<b>MS-07 - Wind on crops and trees (*)</b> Chair : Connell Miller	
	11:00 - 11:15	77 - Wani, A. 'Effect of Steep Escarpment on the Wind Pressure Distribution on a Rectangular Shape Building' (p. Abdul Haseeb Wani)	288 - Wu, X., Zuo, D.: 'Probabilistic simulation of tornado-like loading on a low-rise building based on laboratory testing' (p. Xinyang Wu)	41 - Fu, G., Qian, Y., Gu, M.: 'Explainable machine-learning-based prediction model for wind-induced interference factor of two neighboring high-rise buildings' (p. Guoqiang Fu)	261 - Wu, Y., Chen, X.: 'Estimation of multi-mode coupled galloping of multi-span ice-accreted transmission conductors' (p. Yanchi Wu)	59 - Boonyapinyo, V., Junruang, J., Thangthong, W.: 'Aerodynamic static coefficients of two parallel cable-stayed bridges by wind tunnel test and CFD' (p. Virote Boonyapinyo)	73 - Ebert, C., Gorbachova, Y., Uijt de Haag, M., Weiss, J., Milani, D.: 'A Gappy POD approach to reconstruct the wind field in urban environment for air mobility applications' (p. Carola Ebert)	29 - Sterling, M., Huo, S., Baker, C.: 'Using crop fall patterns to provide an insight into thunderstorm downbursts' (p. Mark Sterling)	
	11:15 - 11:30	555 - De Troyer, T., Andrianne, T., Runacres, M., Denoël, V.: 'On the identification of a wake-oscillator model from forced-motion wind tunnel experiments' (p. Tim De Troyer)	366 - Tamura, Y., Yang, Q., Wang, Y.: 'Design of temporary, conditional, and highly influential buildings for severe local storms including tornadoes' (p. Yukio Tamura)	44 - He, B., Qian, Y., Feng, C., Gu, M.: 'Can wind loads of a twisted building in the untwisted wind field be equivalent to those of an untwisted building in the twisted wind field?' (p. Bin He)	264 - Smith, D., Flay, R., Turner, R., Locke, N., Aghamohammadi, M.: 'Transmission line ice accretion and wind loads modelling' (p. Daniel Smith)	152 - Kanti, V., George, T., PS, R., Kumar, S.: 'Interference effects on tall concrete chimneys: Disparity between codes and wind tunnel' (p. John Kilpatrick)	116 - Weerasuriya, A., Zhang, X., Lu, B., Tse, T.: 'Pedestrian-level wind environment near a square-shaped super-tall building in various urban-like settings' (p. Asiri Weerasuriya)	47 - Hong, E., Kopp, G.: 'Developing a framework for automatically identifying tornado characteristics in forests' (p. Emilio Hong)	
	11:30 - 11:45	134 - Hnin, T., Yagi, T., Matsumiya, H., Noguchi, K., Kyotani, R.: 'Kármán vortex effect on galloping instability of cylinders' (p. Yagi Tomomi)	336 - Caracoglia, L.: 'Efficiency of a torsional flutter harvester in thunderstorm-like turbulent winds: some recent results' (p. Luca Caracoglia)	46 - Han, Z., Li, B., Li, C., Zhang, X.: 'Study on wind load characteristics and aeroelastic performance of high-rise buildings based on the measured urban wind field' (p. Zhen Han)	265 - Zhou, Q., Gao, Y., Zhu, L.: 'Wind loads investigation on angle steel columns in lattice structures via force measurement method on members' (p. Qi Zhou)	163 - Yamane, Y., Kamata, S., Yasuyuki, I., Yoshida, A., Akashi, M.: 'Impact of a single high-rise building on the wind pressure acting on the surrounding low-rise buildings' (p. Akashi Mochida)	188 - Ma, H., Zhou, X.: 'CFD simulation of forced convective heat transfer in street canyon: effect of wind direction and tree planting' (p. Huixin Ma)	72 - Mohammadi, M., Sterling, M., Baker, C., Soper, D., Jesson, M.: 'A wind engineering approach to understanding lodging' (p. Mohammadreza Mohammadi)	
	11:45 - 12:00	143 - Blocken, B., Gillmeier, S., Malizia, F., van Druenen, T.: 'Influence of a nearby car on the aerodynamic drag of a cyclist' (p. Bert Blocken)	533 - Hadavi, M., Romanic, D.: 'Assessment of atmospheric environments prone to damaging downbursts in Canada' (p. Djordje Romanic)	161 - Lhotka, C., Lombardo, F.: 'Optimizing openings through tall buildings to mitigate their crosswind response' (p. Cory Lhotka)	273 - Lee, S., Hoang, P., Kwon, S.: 'Wind tunnel tests of transmission tower subjected to combined yawed and tilted wind' (p. Seungho Lee)	24 - Xiao, H., Liu, Z., Chen, Z., Yan, A.: 'Aerodynamic interference effects of two cable-stayed bridges with triple separated parallel decks' (p. Han Xiao)	267 - Zhang, Y., Cao, S., Cao, J.: 'An efficient simulation of urban strong wind field during the typhoon process using the embedded LES model' (p. Yuxin Zhang)	167 - Jessa, F., Miller, C., Kopp, G.: 'Use of NDVI from satellite imagery to assess tornado tracks in crops' (p. Fahim Jessa)	
Break	12:00 - 12:15								
Technical Sessions		<b>TS-02 (2) - Bluff body aerodynamics</b> Chair : Mingfeng Huang	<b>MS-01 (2) - THUNDERR (G. Solari Memorial session)</b> Chair : Massimiliano Burlando	<b>TS-08 (2) - High-rise buildings</b> Chair : Chris Geurts	<b>TS-07 (1) - Field measurements</b> Chair : Jonas Snaebjornsson	<b>TS-25 (1) - Vibration control and optimization</b> Chair : Soon Duck Kwon	<b>TS-23 (2) - Urban wind environment</b> Chair : Shuyang Cao	<b>TS-27 - Wind effects on plants and trees</b> Chair : Mark Sterling	
	12:15 - 12:30	189 - Zhang, R., Liu, Z., Chen, Z.: 'Large eddy simulation of vortex-induced forces on an oscillating circular cylinder in subcritical regime' (p. Ruilin Zhang)	396 - Geuzaine, M., Arul Jayachandran, M., Kareem, A.: 'Improving the Detection of Shapelets in Time Series for Thunderstorm Classification' (p. Margaux Geuzaine)	184 - Lee, H., Kang, T.: 'Improved Wind Response Assessment Using Both HFPI and Numerical Simulation' (p. Hansol Lee)	94 - Koekemoer, J., Bredell, J., Venter, G., Reinecke, J.: 'Full-scale measurements of wind load effects in a photovoltaic single-axis tracker module rail' (p. JR Bredell)	333 - Xu, S., Fang, G., Zhang, M., Ølseth, O., Ge, Y.: 'Tuned mass dampers for multi-mode vortex-induced vibration control in long-span bridges with dense frequencies' (p. Shengyi Xu)	272 - Akashi, M., Yota, O., Yasuyuki, I., Ryutaro, O.: 'Urban morphology promoting high breathability and controlling strong winds at the pedestrian level' (p. Akashi Mochida)	287 - Jaffe, A., Elliott, L., Sills, D., Kopp, G.: 'Remote-sensing methods for assessing tornado and downburst damage in forests' (p. Aaron Jaffe)	
	12:30 - 12:45	194 - Jiang, Z., Ma, Q., Li, Y., Smith, D., Flay, R.: 'Influence of flow turbulence on circular cylinder aerodynamics' (p. Richard G.J. Flay)	420 - Alrawashdeh, H., Stathopoulos, T.: 'Non-synoptic wind effects on buildings: Current perspectives on research and practice' (p. Theodore (Ted) Stathopoulos)	193 - Jiang, Z., Li, Y., Ma, Q., Flay, R.: 'The dynamic response of a circular cylinder using combined wind loads from two sets of data' (p. Zhenhua Jiang)	104 - McTavish, S., Ghorbanishohrat, F., McAuliffe, B.: 'Measurement of the On-Road Wind Environment in Channelled Roadways' (p. Sean McTavish)	407 - Min, X., Guo, Y., Chen, W.: 'Flow characteristics of vortex-induced vibration of cable model under passive-suction-jet control' (p. Xiang-Wei Min)	355 - Paden, I., Peters, R., García-Sánchez, C., Ledoux, H.: 'High-detailed city reconstruction for urban flow simulations' (p. Ivan Paden)	776 - Rhee, D., Lombardo, F.: 'Estimating lodging speed of corn stalks and wind field of Bondurant, IA tornado using corn-fall pattern' (p. Daniel Rhee)	
	12:45 - 13:00	222 - Ze, L., Yan, L., He, X.: 'Experimental identification of two-dimensional aerodynamic admittance functions of different bridge decks and its application' (p. Lin Ze)	385 - Jesson, M., Sterling, M.: 'Application of Proper Orthogonal Decomposition to physically simulated downburst wind loads' (p. Mike Jesson)	587 - Dong, Y., Li, S., Anarak, K., Catarelli, R., Guo, Y., Gurley, K., van de Lindt, J.: 'Modeling Windborne Debris Flight Trajectory in Urban Communities' (p. Yue Dong)	175 - Han, X., Li, Q., Li, X.: 'Non-Gaussian characteristics of wind pressures on a 600-m-high skyscraper during Super Typhoon Mangkhut' (p. Xuliang Han)	452 - Wang, Z., Li, K., Zhao, L., Cui, W., Ge, Y.: 'A novel aerodynamic control for flutter instability of a long-span bridge by active flaps' (p. Zilong Wang)	359 - Yu, J., Stathopoulos, T., Li, M.: 'Influence of Upstream Fetch for Environmental Wind Engineering Applications' (p. Jianhan Yu)	678 - Minami, K., Yonezawa, C., Okaze, T.: 'Wind Velocity Reduction with Iguene as Traditional Homestead Trees in Osaka Koudo, Japan' (p. Kento Minami)	
	13:00 - 13:15	597 - Tiwari, N., Sarkar, P.: 'Wind tunnel study on correlation of aerodynamic forces on a tapered circular cylinder in a yawed flow' (p. Nayan Tiwari)	721 - Feng, Y., Hao, J., Su, B., Li, J., Wu, T.: 'Downburst Outflow Generation in Boundary Layer Wind Tunnel Using a Multi-Blade Flow Control Device' (p. Jianming Hao)	246 - Jiang, Y., Shen, G., Yu, S., Xu, H.: 'Influence of Vertical rib on Wind Pressures and Aerodynamic Forces of High-rise Buildings' (p. Yonghan Jiang)	249 - Fang, G., Liu, Z., Zhao, L., Ge, Y.: 'Wind Characteristics and Response of a Long-Span Bridge During Direct Attack of a Strong Typhoon' (p. Genshen Fang)	593 - Xu, K., Li, Z., Han, Q., Dai, Q.: 'Analytical design formulas of TMD/TMDI for vortex-induced vibration control of bridges' (p. Kun Xu)	379 - García-Sánchez, C., de Jongh, W., Paden, I., Dukai, B.: 'Using morphological analysis to predict the potential for high wind speeds' (p. Clara García-Sánchez)		
	13:15 - 13:30	706 - Rigo, F., Andrianne, T., Denoël, V.: 'Generalized vortex induced vibration model and extension to tandem arrangement' (p. Francois Rigo)	749 - Mason, M.: 'A Two-Process Near-Surface Downburst Wind Field Model' (p. Matthew Mason)	270 - Salehinejad, M., Li, Y., Ma, Q., Flay, R.: 'A wind load distribution approach for tall buildings based on high frequency force balance measurements' (p. M Mahdi Salehinejad)	303 - Li, J., Wang, J., Feng, W.: 'Research on the wind speed distribution at the height of long-span bridge deck in U-shaped valley' (p. Jiawu Li)	853 - Sorge, E., Caterino, N., Demartino, C., Georgakis, C.T.: 'A dissipative rocking system to mitigate the structural demand to wind turbine towers against severe wind loads' (p. Ettore Sorge)	402 - Wang, X., Kikumoto, H., Hu, C., Jia, H., Nakao, K.: 'Estimation of near-ground wind velocity and temperature in the urban area around Tokyo Bay using local objective analysis data and the POD-LSE method' (p. Xiang Wang)		
	12:15 - 13:35	<b>Poster area (level -1)</b> PS-01 - Poster session Chairs: Niccolò Barni & Cong Chen							
Lunch Break	13:30 - 14:30								

(\*): The session will start 5 min prior to the scheduled time

MONDAY 28th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session		<b>TS-03 (1) - Bridge aerodynamics</b> Chair : Lin Zhao	<b>TS-06 (1) - Computational wind engineering</b> Chair : Tetsuro Tamura	<b>TS-14 (1) - Non-synoptic wind effects</b> Chair : Fred Haan	<b>TS-07 (2) - Field measurements</b> Chair : Alberto Maria Avossa	<b>TS-16 (1) - Performance-Based Wind Engineering</b> Chair : Seymour Spence	<b>TS-21 - Towers and chimneys</b> Chair : Pascal Hémon	<b>TS-22 (1) - Trains and vehicles</b> Chair : Paolo Schito
	14:30 - 14:45	42 - Zhang, Z.: 'Nonlinear VIV Modelling and 3-D Response Properties over a Full Bridge Span' (p. Zhitian Zhang)	74 - Philippou, A., LeBeau, A., Isaac, K.: 'The genesis, evolution and decay of tornados from an initial momentary instability: CFD simulations' (p. Alexis Philippou)	388 - Gairola, A., Bitsuamlak, G., Hangan, H.: 'The effect of surface roughness on the corner flow properties of "tornado-like" vortices' (p. Anant Gairola)	316 - Ibrahim, I., Kopp, G., Sills, D.: 'Utilizing radar-retrieved wind speeds in characterizing high intensity wind fields' (p. Ibrahim Ibrahim)	135 - Uematsu, Y., Yambe, T., Yamamoto, A.: 'A new approach to wind load estimation of photovoltaic panels mounted parallel to sloped roofs' (p. Yasushi Uematsu)	431 - Kurniawati, I., Lupi, F., Seidel, M., Höffer, R., Niemann, H.: 'Across-wind vibration on free-standing wind turbine towers based on field measurements' (p. Ika Kurniawati)	39 - Soper, D., Marshall, S., Wiggins, S.: 'The aerodynamic interaction of platooning and overtaking vehicles' (p. David Soper)
	14:45 - 15:00	55 - Kim, H., Katsuchi, H., Siringoringo, D., Fujino, Y., Yamada, H.: 'Study on stability of vehicles crossing long-span bridge under strong winds' (p. Haeyoung Kim)	105 - Lu, B., Li, Q., Wang, X., Han, X., He, J.: 'Numerical simulation of wind effects on a skyscraper and validation against wind tunnel test and field measurement during a super typhoon' (p. Bin Lu)	391 - Lombardo, F.: 'A philosophy and hierarchy for simulation of non-synoptic winds' (p. Franklin Lombardo)	412 - Zhou, W., Lou, W., Huang, M.: 'Wind field measurements near ground in the Tibetan Plateau' (p. Weizheng Zhou)	211 - Yuan, Y., Yan, B.: 'Twisted-wind effect on the aerodynamic force acting on varying side-ratios tall buildings' (p. Yangjin Yuan)		48 - Li, P., Li, B., Yang, Q., Tian, Y., Li, R.: 'Investigation on aerodynamic characteristics and running safety of high-speed trains under downburst' (p. Peng Li)
	15:00 - 15:15	65 - Bacci, G., Øiseth, O., Argentini, T.: 'Investigation of Laguerre expansion basis for modelling of bridge aeroelastic forces' (p. Giacomo Bacci)	109 - Pallas, N., Bouris, D.: 'A localised, ensemble-based data assimilation for steady-state, laminar flow past a rectangular cylinder' (p. Nikolaos-Petros Pallas)	487 - Aldereguía Sánchez, C., Tubino, F., Bagnara, A., Stolas, S., Piccardo, G.: 'Experimental investigations of thunderstorm effects on tall buildings' (p. Camila Aldereguía Sánchez)	426 - Ma, Z., Xu, F., Zhang, M., Fenerci, A., Øiseth, O.: 'Wind field characteristics at the Outdoor Experimental Base for Bridge/Wind Engineering' (p. Zhaoyu Ma)	218 - Hu, X., Fang, G., Ge, Y.: 'Uncertainty propagation in buffeting fragility analysis of long-span bridges using surrogate models' (p. Xiaonong Hu)	837 - Torrielli, A., Giusti, A.: 'Rubber bearings and vortex shedding of groups of offshore wind turbine towers in high Reynolds number regime' (p. Alessio Torrielli)	102 - Gromke, C., Ruck, B.: 'A Model for the Estimation of the lateral aerodynamic Peak Pressure Load on Cyclists induced by overtaking Vehicles' (p. Christof Gromke)
	15:15 - 15:30	76 - Kildal, O., Petersen, Ø., Øiseth, O.: 'Identification of aerodynamic admittance functions using an active turbulence grid' (p. Oddbjørn Kildal)		811 - Narancio, G., Romanic, D., Chowdhury, J., Hong, H., Hangan, H.: 'Can pressure coefficients obtained from ABL wind tunnel be used for tornadoes?' (p. Gabriel Narancio)	532 - Wang, S., Estephan, J., Irwin, P., Chowdhury, A., Lyman, G., Reed, D., Worthy, A.: 'Field Investigation of pressure loadings on rooftop photovoltaic panel array' (p. Dorothy Reed)	232 - Mehta, K.: 'Holistic approach to learn from wind damage' (p. Kishor Mehta)	847 - Mannini, C., Massai, T., Giachetti, A., Giusti, A.: 'Dynamic loading of offshore wind turbine towers arranged in groups on port quaysides' (p. Claudio Mannini)	291 - Liu, C., Gao, G., Wang, J., Shang, W.: 'Research on the anti-snow performance of the diversion-slot structure in the bogie regions of alpine EMU' (p. Cao Liu)
	15:30 - 15:45	130 - Daniotti, N., Bogunović Jakobsen, J., Snæbjörnsson, J., Cheynet, E.: 'A study of bridge deck aerodynamics through full-scale surface pressure measurements' (p. Jónas Þór Snæbjörnsson)	139 - Katz, C.: 'CFD simulations of vortex shedding for single and interacting sections' (p. Casimir Katz)	372 - Xing, J.: 'Non-stationary wind effects estimation using LES: the case of a large-span roof' (p. Jin Xing)	543 - Guha, T., Kresse, D., Banks, D.: 'Full Scale Investigation into the Dynamic Response of Solar Trackers in high winds' (p. David Kresse)	281 - Zhou, L., Tse, T., Hu, G.: 'Spatiotemporal correlations of aerodynamic load and flow structures of buildings with different heights exposed to twisted wind profile' (p. Tim K.T. Tse)	841 - Rahman, S., Jain, A., Jha, K., Bharti, S., Datta, T.: 'Frequency domain and reliability analyses of concrete chimney under vortex-induced vibration' (p. Saba Rahman)	
Coffee Break	15:45 - 16:15							
Technical Sessions		<b>TS-03 (2) - Bridge aerodynamics</b> Chair : Ole Øiseth	<b>TS-06 (2) - Computational wind engineering</b> Chair : Luca Bruno	<b>TS-14 (2) - Non-synoptic wind effects</b> Chair : Federica Tubino	<b>TS-30 - Wind field simulation</b> Chair : Maria Pia Repetto	<b>TS-16 (2) - Performance-Based Wind Engineering</b> Chair : Francesco Petriani	<b>TS-19 (1) - Roof and cladding</b> Chair : Andrea Giachetti	
	16:15 - 16:30	187 - Jurado, J., Quintela, J., Hernández, S., Kusano, I.: 'Flutter analysis of bridges with curvature in plan view' (p. José Ángel Jurado)	170 - Kim, M., Jeong, S., Kang, T.: 'Verification of Generated Time-History Wind Loads Using Computational Fluid Dynamics' (p. Min Kyu Kim)	239 - Tiwari, N., Sarkar, P.: 'Prediction of buffeting loads and responses of a tall building in tornado wind using sectional aerodynamic properties' (p. Partha Sarkar)	43 - Wang, J., Tse, T., Li, S.: 'Extreme typhoon wind speeds in Hong Kong integrating the effects of climate change using the Shared Socioeconomic Pathway 5-85 (SSP5-85)' (p. Jiayao Wang)	296 - Zhao, L., Yang, Q., Guo, K.: 'Crosswind response analysis of high flexible structures with circular sections based on GVP aerodynamic damping and ENLE technique' (p. Ling Zhao)	37 - Guo, Y., Kopp, G.: 'Application of the quasi-steady vector model to uplift on low-rise buildings with sloped roofs' (p. Yitian Guo)	
	16:30 - 16:45	242 - Quintela, J., Jurado, J., Fontán, A., Hernández, S.: 'Non-linear structural model of a suspension bridge for the reliability analysis considering uncertainties in wind speed and flutter derivatives.' (p. Juan Quintela)	376 - Mijorski, S., Krassas, A., Renda, S., de Villiers, E.: 'Validation of an efficient block-coupled solver and automated workflow for urban wind flow modelling' (p. Sergey Mijorski)	315 - Mejia, A., Ahmed, F., Elawady, A.: 'Downburst outflow characterization and surface roughness terrain effect' (p. Fahim Ahmed)	84 - Liu, Z., Chen, J.: 'Modeling and simulations of 3-D turbulence wind field based on rapid distortion theory' (p. Zenghui Liu)	337 - Shah, M., Flay, R., Norris, S., Turner, R.: 'Wind predictions of ex-Tropical Cyclone Cook making a direct hit on Auckland CBD' (p. Muizz Shah)	67 - Soltys, R., Tomko, M., Kmet, S., Georgakis, C.: 'Dynamic parameters and aerodynamic pressure estimation of a long-span suspension cable roof' (p. Robert Soltys)	
	16:45 - 17:00	248 - Xie, R., Zhao, L., Ge, Y.: 'Aerodynamic characteristics of a streamlined box girder under non-uniform shear flow with turbulence intensity' (p. Ruihong Xie)	196 - Sanemitsu, T., Ikegaya, N.: 'Effect of the momentum provision on the low-occurrence wind velocity components at pedestrian levels around a simplified urban array' (p. Toshiaki Sanemitsu)	322 - Jin, Z., Cao, J., Cao, S.: 'Comparison of load characteristics of a high-rise building under synoptic and non-synoptic wind profiles' (p. Zhenjiang Jin)	230 - Jena, S., Gairola, A.: 'Resolution of Lower-Level Boundary Layer Turbulent Processes Using WRF and Machine Learning' (p. Siddarth Jena)	360 - Iancovici, M., Nică, G., Văcăreanu, R., Ionică, G.: 'Time-domain wind-induced damage estimates for building structures' (p. Mihail Iancovici)	732 - Manara, G., Lori, G.: 'On the controversial frequency limit to ignore resonance effects of façade behaviour under wind loading' (p. Giampiero Manara)	
	17:00 - 17:15	292 - Zhu, L., Qian, C., Ding, Q.: 'Identification of amplitude-dependent flutter derivatives of bridge deck via free coupled vibration test of sectional model' (p. Le-dong Zhu)	392 - Romanus, R., Lugarini, A., Oliveira Jr., W., Franco, A.: 'A viable framework for wind load assessments with Large Eddy Simulations' (p. Alan Lugarini)	346 - Brusco, S., Kopp, G.: 'Local effects induced by tornadoic flows on a low-rise structure for different building orientations' (p. Stefano Brusco)	446 - Liu, Y., Hong, H.: 'Use of dual-tree complex wavelet packet transform to generate tri-component thunderstorm wind records' (p. Yongxu Liu)	398 - Yin, J., Yang, Q., Liu, M., Da, L., Zhao, L.: 'An evaluation theory of area-averaged mean wind pressure with consideration of uneven distribution in tributary' (p. Jiaqi Yin)	106 - Mejinor, A., Kopp, G.: 'Performance-based design of façades for wind-borne debris impacts' (p. Angela Mejinor)	
	17:15 - 17:30	517 - Wang, C., Massai, T., Barni, N., Hua, X., Mannini, C.: 'Nonlinear self-excited forces on a 5:1 rectangular cylinder in torsional post-flutter' (p. Chaoqun Wang)	217 - Wang, J., Xiaodong, Z., Feng, W., Li, J.: 'Investigation of the vibration and fluid characteristics in a 5:1 rectangular section' (p. Jiaying Wang)	633 - Haan, F.: 'Mapping static pressure gradients in a tornado-like vortex' (p. Frederick Haan)	559 - Chen, G., Lombardo, F., Roueche, D.: 'A tornadic field retrieval method based on wind-induced debris video-analysis' (p. Guangzhao Chen)	590 - Duarte, T., Arunachalam, S., Subgranon, A., Spence, S.: 'Validation and Error Quantification of Data-Informed Stochastic Wind Models for Performance-Based Wind Engineering Applications' (p. Arthriya Subgranon)	133 - Liu, X., Gu, S., Liu, M., Nie, S., Zhou, Y.: 'Equivalent elastoplastic constitutive spring model for the seam of stand seam roofs' (p. Min Liu)	
17:30 - 17:45		231 - Xu, M., Patrino, L., de Miranda, S.: 'The CFD modelling of permeable surfaces: a pressure-velocity jump approach' (p. Mao Xu)	305 - Chen, Q., Zuo, D., Tang, Z., James, D.: 'Tornado-like loading on a low-rise building model by a single-celled vortex and a two-celled vortex' (p. Qiang Chen)	834 - Xhelaj, A., Žužul, J., Canepa, F., Ricci, A., Romanic, D., Burlando, M., Hangan, H.: 'Comparison between stationary downburst-like impinging jets and analytical models' (p. Andi Xhelaj)	602 - Chen, B., Hao, C.: 'Definition of storm duration and duration effects on structural elastoplastic response' (p. Bo Chen)	154 - Xin, L., Zhou, X., Gu, M.: 'Modified FAE method based on CFD simulation for predicting snowdrift on gable roofs' (p. Lingui Xin)		
Break	17:45 - 18:00							
Technical Sessions		<b>TS-02 (3) - Bluff body aerodynamics</b> Chair : Guangzhong Gao	<b>TS-06 (3) - Computational wind engineering</b> Chair : Felix Nieto	<b>TS-29 (1) - Wind energy</b> Chair : Luca Caracoglia	<b>TS-25 (2) - Vibration control and optimization</b> Chair : Xugang Hua	<b>TS-09 (2) - Interference effects</b> Chair : Ho-Kyung Kim	<b>TS-19 (2) - Roof and cladding</b> Chair : Bo Chen	<b>TS-15 (1) - Pedestrian wind comfort</b> Chair : Holger Koss
	18:00 - 18:15	319 - Wang, P., Li, M.: 'Effects of streamwise gust amplitude on the boundary layer of two tandem circular cylinders' (p. Peiyuan Wang)	258 - Krassas, A., Mijorski, S., Renda, S., de Villiers, E.: 'Validation of a numerical model for the prediction of pollutant dispersion over Tokyo's Polytechnic University campus' (p. Apostolos Krassas)	34 - Le, H., Kwon, S., Law, K.: 'Hybrid Energy Harvesting from Wind and Bridge Vibrations' (p. Hai Dang Le)	97 - Wang, Q., Zhang, B., Yu, X.: 'Novel Damper of Nonlinear Energy Sink Mitigating Wind-Induced Responses of Super High-rise Buildings' (p. Qinhua Wang)	277 - Pistol, A., Klaput, R., Flaga, Ł., Kocór, A., Rizzo, F., Giusti, A., Zareba, W., Flaga, A.: 'The wind shielding factor for wind turbine blades stored in groups' (p. Aleksander Pistol)	155 - Zhou, X., Zhang, T.: 'Wind tunnel simulations of snow transport on a flat roof during snowfall' (p. Xuanyi Zhou)	36 - Wang, W., Ikegaya, N.: 'Low-occurrence strong wind speed in idealized building cases: Comparison of estimation methods' (p. Wei Wang)
	18:15 - 18:30	328 - Flaga, A.: 'Authorial models of buffeting wind actions on slender rigid structures considering similarity principles of mechanic phenomena' (p. Andrzej Flaga)	269 - Fan, S., Liu, Z., Cao, Y., An, X.: 'Study on dense flying debris of tornado at different stages considering turbulence effects' (p. Shuanglong Fan)	111 - de Almeida, E., Orteli, S., Silveira, V., Gutiérrez, A.: 'Operational wind power forecast with ANN GFS-WRF ensembles members' (p. Everton de Almeida)	114 - Vilceanu, V., Chawdhury, S., Morgenthal, G.: 'Partitioned numerical coupling for vortex-induced vibrations of a slender chimney equipped with tuned liquid damper' (p. Victor Vilceanu)	374 - Lupi, F., Seidel, M., Niemann, H., Hoeffler, R.: 'Aeroelastic effects for towers in group arrangement' (p. Francesca Lupi)	857 - Imbrenda, A., Graziosi, M., Graini, A., Massai, T., Bartoli, G., Mannini, C.: 'Experimental analysis of wind action on a large wavy roofing' (p. Andrea Imbrenda)	63 - Qiang, L., Yasuyuki, I., Hideyuki, T., Mochida, A., Yang, Q., Tamura, Y.: 'LES of strong wind mechanisms at pedestrian level around buildings with same aspect ratio of 2 and different sizes' (p. Lin Qiang)
	18:30 - 18:45	331 - Salvetti, M., Lunghi, G., Mariotti, A.: 'Experimental investigations on the effect of corner roundness and angle of attack on the BARC configuration' (p. Alessandro Mariotti)	284 - Martínez-López, G., Péntek, M., Warnakulasuriya, S., Lázaro, C., Bletzinger, K.: 'Reducing the computational cost of forced-motion simulations to obtain flutter derivatives' (p. Guillermo Martínez-López)	121 - Gao, H., Hu, G., Chen, W., Li, C., Xiao, Y., Kwok, K.: 'Urban Wind Field Real-Time Reconstruction Based on Optimal Sparse Sensors and Deep Learning Model' (p. Huanxiang Gao)	178 - Zhao, W., Quan, Y.: 'Parameter optimization of tuned inerter-negative-stiffness damper for wind-excited high-rise buildings' (p. Weiwei Zhao)	415 - Dong, X., Zhao, L., Chen, X., Ge, Y.: 'Experimental study of interference effect on super large cooling towers exposed to tornado-like vortices' (p. Xu Dong)	339 - Alawode, K., Elawady, A., Lee, S., Chowdhury, A., Lori, G.: 'Wind Induced Vibration (WIV) and Wind Driven Rain (WDR) Effects on Glazed Curtain Wall Systems' (p. Guido Lori)	125 - Akahoshi, A., Uematsu, Y.: 'Criterion for wind environment assessment based on the percentage of people dissatisfied with strong winds' (p. Akinori Akahoshi)
18:45 - 19:00	353 - Chen, C., Thiele, K.: 'Spanwise correlation of unsteady lift due to vortex shedding on the square cylinder: a time-frequency analysis' (p. Cong Chen)	343 - Panchal, A., Basu, D.: 'Numerical Evaluation of Spatial Variability of Pressure Coefficient on Tall Buildings against Wind Forces' (p. Aniket Panchal)	214 - Rahnamay, K., Fleck, B., Komrakova, A., Church, R., Chou, E.: 'Project Condor: Numerical study of bio-inspired winglets in wind turbine applications' (p. Khashayar Rahnamay)	190 - Sun, H., Zhu, L., Zhu, Q.: 'Spanwise layout optimization for aerodynamic measures against multi-mode vortex-induced vibration on bridges' (p. Hao Sun)	419 - Alrawashdeh, H., Stathopoulos, T.: 'A highway tunnel portal: A case study for ground-level wind mapping' (p. Hatem Alrawashdeh)	696 - Liang, Q., Yang, Q., Liu, M., Nie, S., Wang, Z.: 'An Equivalent Spring Model for the Standing Seam Metal Sheet System' (p. Qisheng Liang)	140 - Seta, K., Hirose, C., Ikegaya, N.: 'Prediction of pedestrian-level wind velocity obtained by outdoor measurement in an urban area' (p. Koki Seta)	

TUESDAY 29th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session	8:30 - 9:45	<b>Keynote Session B</b> <b>Ketil Aas-Jakobsen</b> 'Wind engineering for conceptual design of long span bridges excited by wind and waves' Chair : Yaojun Ge						
Coffee Break	9:45 - 10:15							
Technical Sessions		<b>TS-03 (3) - Bridge aerodynamics</b> Chair : Guy Larose	<b>MS-02 (1) - Machine Learning &amp; Artificial Intelligence applications to wind engineering (*)</b> Chair : Hui Li	<b>TS-02 (4) - Bluff body aerodynamics</b> Chair : Yasushi Uematsu	<b>MS-03 (1) - New frontiers in modeling nonlinear dynamics of wind-structure interactions (*)</b> Chair : Ahsan Kareem	<b>MS-05 (1) - Windblown Sand Sciences and Engineering (*)</b> Chair : Jeroen Van Beeck	<b>TS-23 (3) - Urban wind environment</b> Chair : Bert Blocken	<b>MS-08 - Wind Engineering for Modular Sustainable Energy Islands (*)</b> Chair : Charalampos Baniotopoulos
	10:15 - 10:30	657 - Srouji, R., Daniotti, N., Hansen, S., Isaksen, B.: 'Wind actions on Gjemsnesund Bridge in full scale and model scale' (p. Robin George Srouji)	60 - Wei, M., Fang, G., Ge, Y.: 'Typhoon genesis model based on Support Vector Machine considering effects of multiple meteorological parameters' (p. Miaomiao Wei)	393 - Wang, J., Kopp, G.: 'Aerodynamic admittance functions of windward walls with different aspect ratios' (p. Jin Wang)	207 - Hui, Y., Liu, Z.: 'A mathematical model for aerodynamic coupling effect analysis of high-rise buildings' (p. Yi Hui)	205 - Preziosi, L.: 'Mathematical modelling of wind-sand multiphase flows' (p. Luigi Preziosi)	476 - Pappa, V., Bakolas, A., Bouris, D., Gromke, C.: 'Effects of Façade and Rooftop Greening on the Surface Pressure Distribution of an isolated cubic Building with vertical Apertures.' (p. Vasiliki Pappa)	468 - Nieto, F., van Beeck, J., Kozmar, H.: 'Wind engineering for modular sustainable energy islands: project proposals and synergies for international collaborative research' (p. Hrvoje Kozmar)
	10:30 - 10:45	850 - Nicese, B., Chen, C., Marra, A., Bartoli, G., Thiele, K., Mannini, C.: 'Role of spanwise correlation in the vortex-induced vibration of a non-streamlined bridge deck section' (p. Bernardo Nicese)	68 - Li, S., Laima, S., Li, H.: 'Data-driven modeling of bridge vortex-induced vibration via a physics-guided machine/deep learning framework' (p. Shanwu Li)	408 - Guo, Y., Min, X., Chen, W.: 'Pressure properties of twisted elliptic cylinders at moderate Reynolds number' (p. Yanjiao Guo)	735 - Kavrakov, I., McRobie, A., Morgenthal, G.: 'Gaussian Process Modelling of Nonlinear Aerodynamic Forces Acting on Bluff Bodies' (p. Igor Kavrakov)	70 - Wang, Y., Tse, T.: 'Numerical study of sand particles transporting in the atmospheric Ekman boundary layer' (p. Yixiang Wang)	486 - Huang, M., Liao, S.: 'Multi-scale numerical simulation of typhoon wind effects on urban building blocks' (p. Mingfeng Huang)	694 - Tewolde, S., Hoeffler, R., Futter, D.: 'Application of topology optimisation and additive manufacturing for the effective operation of offshore wind turbines' (p. Ruediger Hoeffler)
	10:45 - 11:00	320 - Lei, Y., Li, M., Sun, Y.: 'Vortex-induced vibration analysis of long-span bridge in time domain by finite elements' (p. Yongfu Lei)	88 - Hong, X., Hu, L., Kareem, A.: 'A tropical cyclone intensity model based on the conditional generative adversarial network' (p. Xu Hong)	507 - Sanders, C., Morrison, M.: 'Full-scale wind loads on flashing' (p. Chris Sanders)	241 - Cui, W., Zhao, L., Ge, Y.: 'VIV modes competition of long-span bridges with closely-spaced multi-modes' (p. Wei Cui)	317 - Tominaga, Y.: 'Wind tunnel experiment and CFD simulation of sand surface deformation around a cubic obstacle' (p. Yoshihide Tominaga)	514 - Adali, B., Altan, Y.: 'Heat flux performance analysis of a generic urban environment with control volume' (p. Berk Adali)	722 - Mendez Morales, M., Tankova, T., Branco, R., Rebelo, C.: 'Appraisal of structural health monitoring systems for the development of new joints for modular wind towers' (p. Mariela Mendez Morales)
	11:00 - 11:15	536 - Thiele, K., Chen, C.: 'Aeroelastic instability of steel/composite bridges in the launching phase' (p. Klaus Thiele)	98 - Zhang, Z., Laima, S., Li, H.: 'Identification of the form of self-excited aerodynamic force of a bridge deck based on machine learning' (p. Shujin Laima)	433 - Gao, G., Yan, X., Sun, Y., Zhu, L.: 'Investigation on wind-induced instabilities of a H-shaped cylinder by a novel 3DOF mechanical system' (p. Guangzhong Gao)	263 - Huang, J., Chen, X.: 'Inelastic response analysis of tall buildings to wind using reduced-order model with degradation effect' (p. Xinzhong Chen)	611 - Sherman, D., Zhang, P.: 'Estimating aeolian sand-drift potential for hazard mitigation' (p. Douglas Sherman)	528 - Stenabaugh, S., Brooks, A., Galsworthy, J.: 'Wind-Induced Door Operability - The Case for Establishing Design Criteria' (p. Sarah Stenabaugh)	849 - Heng, J., Zhang, J., Dong, Y., Kaewruen, S., Baniotopoulos, C.: 'MODENERLANDS Digital Twins-based deterioration prognosis of wind turbine tower under wind-wave-corrosion' (p. Charalampos Baniotopoulos)
	11:15 - 11:30	324 - Noguchi, K., Ito, Y., Yan, Y., Yagi, T.: 'Evaluation of vortex-induced vibration of a box girder bridge using forced oscillation method with LES' (p. Kyohei Noguchi)	119 - Wang, Q., Yan, L., Hu, G.: 'DRlinFluids An open-source Python platform of coupling deep reinforcement learning and OpenFOAM' (p. Qiulei Wang)	437 - Yang, Y., Li, M., Tang, J.: 'Buffeting forces acting on a rectangular 5:1 cylinder in various turbulent flows' (p. Yang Tang)	364 - Skyvulstad, H., Petersen, Ø., Argentin, T., Zasso, A., Øiseth, O.: 'Modelling of nonlinear torsional flutter using Volterra models trained on experimental data' (p. Henrik Skyvulstad)	83 - Liu, B., Zhang, K., Qu, J.: 'Protect a desert scenery by restoring the natural wind flow field' (p. Benli Liu)	566 - Ramponi, R., Le, V., Burton, M.: 'Value of on-site wind measurements to close the building design loop' (p. Rubina Ramponi)	746 - Ivanković, M., Manolesos, M., Jentsch, M., Kozmar, H., Nayeri, C.: 'Self-starting characteristics of wind turbines with passive flow-control devices on rotor blades' (p. Marin Ivanković)
Break	11:30 - 11:45							
Technical Sessions		<b>TS-03 (4) - Bridge aerodynamics</b> Chair : Ketil Aas-Jakobsen	<b>MS-02 (2) - Machine Learning &amp; Artificial Intelligence applications to wind engineering</b> Chair : Ahsan Kareem	<b>TS-02 (5) - Bluff body aerodynamics</b> Chair : Tomomi Yagi	<b>MS-03 (2) - New frontiers in modeling nonlinear dynamics of wind-structure interactions</b> Chair : Walter Lacarbonara	<b>MS-05 (2) - Windblown Sand Sciences and Engineering</b> Chair : Benli Liu	<b>TS-23 (4) - Urban wind environment</b> Chair : Akashi Mochida	<b>TS-22 (2) - Trains and vehicles</b> Chair : Hassan Hemida
	11:45 - 12:00	697 - Øiseth, O., Bacci, G., Petersen, Ø.: 'Field observations of the performance of Stockbridge dampers in suppressing severe hanger vibrations at the Hålogaland Bridge' (p. Ole Øiseth)	227 - Elhassan, M., Zhu, L., Alhaddad, W., Tan, Z.: 'Prediction of Static Critical Wind Speed of Centrally-Slotted Box Deck Bridge Using Artificial Neural Network' (p. Mohammed Elhassan)	444 - Manzanares-Bercial, R., Gómez-Ortega, O., Franchini, S., Ogueta-Gutiérrez, M., Mesequer-Garrido, F., Cárdenas-Rondón, J., Martínez-Cava, A., Marín-Coca, S., Ruiz-Moral, J.: 'Analysis of the intermittency of the aerodynamic lateral force on a sphere' (p. Omar Gómez-Ortega)	512 - Nemani, N., Balachandran, B.: 'Nonlinear dynamics of a system of coupled piezoelectric airfoil oscillators' (p. Balakumar Balachandran)	278 - Raffaele, L.: 'Mitigation measures against windblown sand along railways' (p. Lorenzo Raffaele)	628 - Adamek, K., Bitsuamlak, G.: 'Assessing the impact of interior scale geometry on pedestrian level winds and ventilation in cities' (p. Kimberley Adamek)	666 - Larsen, A., B Eriksen, M.: 'Vehicle wind loading and overturning at bridge towers' (p. Allan Larsen)
	12:00 - 12:15	471 - Onstad, E., Solstad, A., Fenerci, A., Petersen, Ø., Øiseth, O.: 'Buffeting response predictions of the Hålogaland Bridge based on a data-driven probabilistic description of the wind field' (p. Andrea Almenningen Solstad)	275 - Yamaguchi, J., Hasama, T., Ito, Y., Arisaka, S., Saka, T.: 'Prediction of mean wind velocity in city block area using machine learning by applying LES results to improve RANS results' (p. Junki Yamaguchi)	308 - Jeong, U., Hartlin, S.: 'Nonlinear analysis of a multi-sloshing mode Tuned Liquid Sloshing Damper coupled with a tall building under across-wind loading' (p. Un Yong Jeong)	538 - Ibrahim, H., Cao, L., Elawady, A., Ricles, J., Marullo, T., Erwin, J., Malik, F.: 'Assessment of Wind-induced Nonlinear Response of Tall Buildings Using Real-time Aeroelastic Hybrid Simulation' (p. Haitham A. Ibrahim)	52 - Wang, T., Liu, B., Niu, Q., Tan, L., Qu, J.: 'Aeolian environment and sediment transportation over gobi with strong winds' (p. Tao Wang)	671 - Kawaguchi, M., Tamura, T., Yoshikawa, M.: 'Towards improvement of wind resistance and ventilation for layout of buildings using urban LES data' (p. Tetsuro Tamura)	448 - Yan, L., Li, J., He, X.: 'Ride comfort assessment of road vehicles on a long-span truss girder suspension bridge under crosswinds' (p. Lei Yan)
	12:15 - 12:30	373 - Han, T., Wu, F., Zhao, L.: 'Aerodynamic force and vortex flow evolution for a double-slotted box girder under vortex-induced vibration' (p. Tingshu Han)	375 - Cotteleer, L., Nixaridis, C., Parente, A.: 'Bayesian Deep Learning for RANS Modelling with Uncertainty Quantification Applied to Wall-Mounted Obstacles' (p. Léo Cotteleer)	535 - Palanivel, H., Mukherjee, R.: 'Passive Flow Control using Three different Vortex Generators to delay Stall on a 3D Wind Turbine Blade' (p. Hariprasanth Palanivel)	216 - Li, C., Chen, Z., Tse, T., Zhang, X., Fu, Y., Lin, X., Wang, Y., Peng, D.: 'The linear-time-invariance notion to the Koopman analysis: decouple and quantify the cause-effect relationships of fluid-structure interactions' (p. Cruz Y. Li)	844 - Gageik, M., Rodriguez Ahlert, C., Coste, N., Raffaele, L.: 'Multi-scales gap bridging for windblown sand as basis of CFD simulation of trains in a sand and dust environment' (p. Manuel Gageik)	792 - Fu, Y., Peng, D., Li, C., Tse, T., Feng, X.: 'ANN-based physio-chemical prediction of the NO-O3 photochemical cycle and the reactive air pollutant dispersion in an urban environment' (p. Daniel Z. Peng)	439 - Tang, L., He, X., Yan, L.: 'Influence of aerodynamic measure on the transient aerodynamic performance of high-speed train passing bridge-tunnel junction under crosswinds' (p. Linbo Tang)
	12:30 - 12:45	323 - Fenerci, A., Øiseth, O.: 'Full-scale Observation of the Buffeting Response of a Suspension Bridge and Comparison with Aeroelastic Tests' (p. Aksel Fenerci)	434 - Chen, N., Ge, Y., Borri, C., Fang, G.: 'Flutter derivatives identification of closed box girders based on gradient boosting decision tree' (p. Genshen Fang)	546 - Markus, D., Weibrecht, T., Hahn, F.: 'The Effect of an Increased Ground-Clearance on Peak Wind Loads on a Single-Axis Solar Tracking System' (p. Daniel Markus)	851 - Barni, N., Bartoli, G., Mannini, C.: 'Moment Lyapunov exponents for a suspension bridge parametrically excited by large-scale turbulence' (p. Niccolò Barni)	644 - Brambilla, E., Prati, I., Ritardo, A., Frizzi, D., Martinati, S., Rocchi, D., Schito, P.: 'Numerical modeling of sand transport using Lagrangian particle tracking' (p. Paolo Schito)	804 - Coburn, M., Vanderweil, C., Herring, S., Xie, Z.: 'Experimental and numerical simulations of airflow over semi-realistic and realistic urban geometries' (p. Matthew Coburn)	712 - Araya Reyes, C., Tomasini, G., Rocchi, D.: 'Crosswind assessment of conventional trains' (p. Carlos Esteban Araya Reyes)
	12:45 - 13:00	489 - Qin, C., Li, M., Li, M., Zhou, Q.: 'An investigation on the VIV characteristics of parallel cable-stayed bridges with different spacings by aeroelastic model wind tunnel test' (p. Chuan Qin)	548 - Ciarlatani, M., Vargiomezis, T., Gorle, C.: 'LES-based multi-fidelity framework for wind loading' (p. Mattia Fabrizio Ciarlatani)	110 - Yu, H., Gao, D., Chen, W., Li, H.: 'Flow Control Effects of Active Suction through a Structured Porous Surface on Cylinder Wake' (p. Haiyang Yu)		551 - Ventura, G., Zannini Quirini, C.: 'Windblown sand mitigation design: the experience of Etihad Rail railway project and the introduction of a new, effective sand mitigation solution' (p. Giulio Ventura)	824 - Okaze, T., Kawashima, R., Ito, T., Omiya, S., Niiya, H., Nishimura, K.: 'Estimation of horizontal distributions of short-term visibility reduction by blowing snow based on a meso-scale meteorological simulation' (p. Tsubasa Okaze)	
	11:45 - 13:05	<b>Poster area (level -1)</b> <b>PS-02 - Poster session</b> <b>Chairs: Giulio Ferri &amp; Theodore Potsis</b>						
Lunch Break	13:00 - 14:00						784 - Palusci, O., Monti, P., Blocken, B.: 'Numerical analysis of the urban ventilation performance of different morphologies in a compact urban area' (p. Olga Palusci)	

(\*): The session will start 5 min prior to the scheduled time

TUESDAY 29th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session	14.00 - 15.15	<b>Keynote Session E</b> <b>Qingshan Yang</b> 'Estimation of Wind Effects on Large Roof Structures' Chair : Massimo Majowiecki						
Coffee Break	15.15 - 15.45							
Technical Sessions		<b>TS-06 (4) - Computational wind engineering</b> Chair : Catherine Gorlé	<b>TS-03 (5) - Bridge aerodynamics</b> Chair : Jasna Bogunovic Jakobsen	<b>TS-02 (6) - Bluff body aerodynamics</b> Chair : Mingshui Li	<b>TS-11 (1) - Low-rise buildings</b> Chair : Gregory Kopp	<b>TS-20 (1) - Stochastic analysis</b> Chair : Vincent Denoël	<b>TS-01 (1) - Aeroelastic effects</b> Chair : Luisa Paghini	<b>TS-12 - Meteorological phenomena</b> Chair : Horia Hangan
	15:45 - 16:00	354 - Gholamalipour, P., Ge, H., Stathopoulos, T.: 'Wind-Driven Rain technique evaluation for CFD application in an urban area' (p. Payam Gholamalipour)	318 - Zhang, B., Zhu, L.: 'Sectional model tests and nonlinear flutter mechanism of old-Tacoma section under large attack angles and large amplitude' (p. Bishang Zhang)	313 - Wang, J., Zhang, Y., Gao, G.: 'An IDDES investigation of influence of lower temperature on the underbody flow of a high-speed train' (p. Jiabin Wang)	28 - Ding, W., Wen, L., Uematsu, Y.: 'Aerodynamic Forces on Domed Free Roofs' (p. Wei Ding)	22 - Li, S., Doddipatla, L., Caracoglia, L.: 'Wind-Borne Compact Debris Trajectory in Two-dimensional Turbulent Wind Fields' (p. Lakshmana Doddipatla)	718 - Dubois, R., Andrienne, T.: 'Modelling flow-induced vibrations of tandem cylinders in the post-critical flow regime' (p. Raphaël Dubois)	69 - Otori, H., Ishihara, T.: 'An analytical model for prediction of wind fields in tornado-like vortices after touch-down stage' (p. Hiromasa Otori)
	16:00 - 16:15	172 - Zou, P., Cao, S., Cao, J.: 'Effects of oscillation frequency and amplitude on vertical forced vibration for rectangular 5:1 cylinder' (p. Pengcheng Zou)	413 - Maheux, S., King, J., El Damatty, A., Brancaloni, F.: 'Test rig for nonlinear section model tests of cable-supported bridges' (p. Sébastien Maheux)	417 - Liao, S., Huang, M.: 'Numerical investigation of flow field and vibration of twin-mast atop of Saige Plaza Building' (p. Sunce Liao)	93 - Parackal, K., Arraiza, P., Morrison, M., Henderson, D.: 'Development of improved test methods for wind driven rainwater ingress through windows and doors' (p. David Henderson)	79 - Da, L., Yang, Q., Liu, M., Yin, J.: 'Estimation of upcrossing rate of mean wind speeds from joint probability distribution of Weibull variables' (p. Lin Da)	357 - Choen, H., Kim, S., Kim, H.: 'Vehicle wind load evaluation according to bridge sections' (p. Hyeonng Yun Choen)	397 - Eng, S., Brimelow, J., Kopp, G.: 'Towards understanding wind-driven hail events, with a focus on Canada' (p. Simon Eng)
	16:15 - 16:30	382 - Badhurshah, R., Álvarez, A., Nieto, F., Jurado, J., Hernández, S.: 'Experimental and numerical results on evaluation of flutter derivatives of twin-box bridge decks with large gaps.' (p. Felix Nieto)	430 - Liu, L., Zou, Y., He, X., Wang, Z.: 'Spacing effect of VIV of twin asymmetrical parallel decks for a long-span rail-cum-road bridge' (p. Lulu Liu)	599 - Wen, L., Nishijima, K.: 'A revised aerodynamic model for 3-DOF flight motion of square plates in winds' (p. Lizhi Wen)	836 - Mannini, C., Massai, T., Panettieri, E., Barni, N., Giachetti, A., Ferrucci, M., Montemurro, M., Vannucci, P.: 'Wind tunnel tests on Notre Dame Cathedral in Paris' (p. Tommaso Massai)	210 - Lei, S., Cui, W., Patruno, L., de Miranda, S., Zhao, L., Ge, Y.: 'State augmentation method for non-stationary vibrations of long-span bridges with multi-degree of freedom' (p. Simian Lei)	367 - Enshaei, P., Chowdhury, J., Sauder, H., Banks, D.: 'Low-Tilt Torsional Instability of Single-Axis Solar Trackers' (p. Parsa Enshaei)	440 - Roegner, D., Lombardo, F., Wienhoff, Z.: 'Storm types influence on the extreme convective wind speeds: Iowa case study' (p. David Roegner)
	16:30 - 16:45	443 - Selvam, R.: 'Peak pressure computation on low rise building using inflow turbulence generator' (p. Rathinam Selvam)	459 - Meng, L., Li, J., Xie, Z.: 'Experimental and numerical studies of VIV performance of twin-box girder bridges with various L-shaped plates' (p. Lu Meng)	608 - Huang, G., Yang, Z., Xia, C., Jefferson-Loveday, R., Seid, K., Leung, R.: 'Experimental Study on Wake Dynamics of D-shaped Bluff Bodies and Ground Effect' (p. Guangyuan Huang)	107 - Gavanski, E., Takamori, K., Taniguchi, T.: 'Wind loads for agrovoltaic systems' (p. Eri Gavanski)	224 - Liu, Z., Fang, G., Ge, Y.: 'Uncertainty Propagation of Turbulence Parameters for Typhoon and Non-typhoon Winds in Buffering Analysis of Long-span Bridges' (p. zihang liu)	679 - Cárdenas-Rondón, J., Martínez-Cava, A., Franchini, S., López-Núñez, E., Navarro Manso, A., Rodríguez Casaso, C.: 'Parametric analysis of a flat solar tracker stability curve using aerodynamic derivatives' (p. Juan A. Cárdenas-Rondón)	478 - Nakajima, K., Yamanaka, T.: 'Impact of future change in sea surface temperature due to global warming on typhoon intensity' (p. Keigo Nakajima)
	16:45 - 17:00	414 - Eshete, T., Geleta, T., Bitsuamlak, G.: 'Wind loads on ground-mounted, isolated and array of solar panels using Large-eddy simulation' (p. Tsigereda Getachew Eshete)	361 - Gao, M., Yan, L., He, X.: 'Experimental identification of longitudinal and vertical lift aerodynamic admittance functions of thin sections' (p. Min Gao)	612 - Zhang, L., Caracoglia, L.: 'Along-wind response of super tall towers equipped with external cable bracing system: preliminary model' (p. Lei Zhang)	191 - Cui, B., Huang, P.: 'The physical characteristics of wind pressures on low-rise buildings: Focusing on the fractal features' (p. Bingchang Cui)	389 - David, L., Servais, J., Guilhot, J.: 'Specific extreme wind probabilities for the Ariane 6 space launch system at the French Guiana Space Center' (p. Louis David)	796 - Hourngir, D., Burlando, M.: 'High-resolution numerical simulation of a thunderstorm-induced downburst event and comparison with measured LIDAR wind measurements' (p. Massimiliano Burlando)	
	17:00 - 17:15	421 - Hwang, Y., Yeo, D.: 'Numerical study on effects of ground surface roughness on wind fields over topography' (p. Yunjae Hwang)	574 - Cao, Y., Huang, Z., Hua, X., Chen, Z., Wan, T.: 'Girder-tower connected viscous damper solution for multi-mode vortex-induced vibration control of long-span suspension bridges' (p. Yiwon Cao)	711 - Chen, W., Wang, H., Liu, X.: 'Experimental investigation of the aerodynamic performance of Flettner rotors for marine applications' (p. Wenlong Chen)	236 - Adhikari, M., Letchford, C.: 'Deep and traditional machine learning models to predict pressure coefficients on low-rise building surfaces' (p. Manoj Adhikari)	166 - Gomez, F., Carrion, J., Spencer, B.: 'Topology optimization of building with stochastic wind loads' (p. Billie Spencer)	760 - Sassa, K., Yamawaki, M., Honda, R.: 'Automatic detection of hock echo by using deep learning' (p. Koji Sassa)	
Break	17:15 - 17:30							363 - Hu, L., Kareem, A.: 'Evaluating the 3D nonlinear tropical cyclone boundary layer (TCBL) model by idealized simulation' (p. Ahsan Kareem)
Technical Sessions		<b>TS-06 (5) - Computational wind engineering</b> Chair : Jinxin Cao	<b>TS-03 (6) - Bridge aerodynamics</b> Chair : Miguel Cid Montoya	<b>TS-02 (7) - Bluff body aerodynamics</b> Chair : Yong Cao	<b>TS-19 (3) - Roof and cladding</b> Chair : Qingshan Yang	<b>TS-20 (2) - Stochastic analysis</b> Chair : Igor Kavrakov	<b>TS-09 (3) - Interference effects</b> Chair : Antonino Maria Marra	
	17:30 - 17:45	212 - Patruno, L., Manes, L., de Miranda, S.: 'SynInflow: recent advancements in the generation and application of inflow turbulence' (p. Luca Patruno)	294 - Chen, W., Sun, S., Yang, W.: 'Multi-mode vortex-induced vibration of a long-span bridge under non-uniform flows' (p. Siwen Sun)	626 - Lafontaine, O., Prevatt, D.: 'Analytical Modeling of Spatio-Temporal Surface Pressures on Air-Permeable Cladding Systems' (p. David O. Prevatt)	14 - Ginger, J., Parackal, K., Ingham S., Lowe R., Hidebrandt C.: 'Wind loads on curved canopy roofs' (p. John Ginger)	588 - Sifton, V., Banks, D., Cole, A., Magness, M., Brydges, J.: 'Downburst winds and the directionality of their extreme values' (p. Valerie Sifton)	247 - Wiczorek, N., Unglaub, J., Thiele, K.: 'Grouping effects on the pressure distribution of cylindrical silos in line' (p. Niccolò Wiczorek)	
	17:45 - 18:00	826 - Ricci, A., Blocken, B.: 'Prediction of mean wind velocity in port areas for wind load provisions: simulated versus analytical profiles' (p. Alessio Ricci)	380 - Truong, N., Vallis, M., Rofail, T.: 'Dynamic Response Mitigation of Enclosed Pedestrian Bridge' (p. Nicholas Truong)	591 - Sridhar, S., Zhang, J., Wang, J., Lebbar, A., Subramanian, C., Pinelli, J., Lazarus, S.: 'Full-Scale Testing on Doors, Windows, Soffit, and Fascia using a Wireless Sensor Network System' (p. Chelakara Subramanian)	736 - Lori, G., Manara, G., Ricciardelli, F.: 'An optimized approach to the structural design of unitized double skin facades' (p. Guido Lori)	752 - Esposito Marzino, M., Denoël, V.: 'Bispectral Analysis for non-Gaussian winds: how and when?' (p. Michele Esposito Marzino)	640 - Su, L., Gu, M.: 'Research on wind-induced interference effect of adjacent super tall buildings based on two-aeroelastic-model wind tunnel test' (p. Linkun Su)	
	18:00 - 18:15	492 - Gu, D., Kareem, A., Lu, X.: 'City-Scale Time History Analysis of Tall Buildings: Computational Framework' (p. Ahsan Kareem)	575 - Wang, J., Katsuchi, H.: 'Experimental investigation on effects of wind barrier on the aerodynamic performance of the bridge' (p. Jiaqi WANG)	45 - Ham, H., Lee, S., Kim H.: 'Mean Reattachment Length of Roof-Separation Bubbles using Proper Orthogonal Decomposition' (p. Hee Jung Ham)	845 - Giachetti, A., Massai, T., Bartoli, G., Ramolini, R., Binini, T., Mannini, C.: 'Wind tunnel study on large-building façade projections' (p. Andrea Giachetti)	813 - Hong, H.: 'On the modelling of time-frequency dependent power spectral density function of the turbulent winds from tropical cyclones and thunderstorms' (p. H.P. Hong)	742 - Ding, F., Yi, S., Taffanidis, A., Kareem, A.: 'Database-enabled surrogate-assisted investigation on the interference effects of two adjacent buildings' (p. Fei Ding)	
	18:15 - 18:30	513 - Yu, X., Wu, T.: 'Embedded Large Eddy Simulation of Flow around a High-Rise Building with an Adjacent Structure' (p. Xinyang Yu)	603 - Katsuchi, H., Wang, J.: 'Experimental investigation on effects of wind barrier on aerodynamic stability of the bridge and the wind velocity on the bridge' (p. Hiroshi Katsuchi)	748 - Li, M., Zhang, H., Yang, Y.: 'Estimation method of the extreme wind pressure of cladding structures based on similarity Law' (p. Mingshui Li)	573 - Geleta, T., Doddipatla, L., Bitsuamlak, G.: 'Application of LES for the assessment of components and cladding loads: comparison to wind tunnel and wind loading provisions' (p. Girma Bitsuamlak)	173 - Acosta, T., Wang, J., Kopp, G.: 'Aspect Ratio Effects on Peak Wind Loads of Low-to-High Rise Buildings using CDF mapping' (p. Timothy John Acosta)		
	18.30 - 18.45		861 - de Miranda, M.: 'Wind in bridge design: experiences and learnings' (p. Mario de Miranda)	800 - Friehe, M., Kemper, F.: 'Practical wind load approaches for antennas of different technical generations' (p. Mirko Friehe)	283 - Kodakkal, A., Martínez-López, G., Péntek, M., Sautter, K., Goldbach, A., Bletzinger, K.: 'Aerodynamic studies for standardized pressure maps on double-curved freestanding membrane roof canopies' (p. Anoop Kodakkal)			

WEDNESDAY 30th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session	8:30 - 9:45	<b>Keynote Session C</b> <b>Vincent Denoël</b> 'Evolution of Equivalent Static Wind Loads and Envelope Reconstruction in Wind Engineering' Chair : Luigi Carassale						
Coffee Break	9:45 - 10:15							
Technical Sessions		<b>MS-04 (1) - Super Long Span Bridges through Multi-Box-Deck solutions (*)</b> Chair : Allan Larsen	<b>MS-02 (3) - Machine Learning &amp; Artificial Intelligence applications to wind engineering</b> Chair : Shujin Laima	<b>TS-29 (2) - Wind energy</b> Chair : Alessio Torrielli	<b>TS-31 (1) - Wind tunnel techniques</b> Chair : Thomas Andrienne	<b>TS-18 (1) - Risk and damage</b> Chair : Mihail Iancovici	<b>TS-08 (3) - High-rise buildings</b> Chair : Yukio Tamura	<b>TS-15 (2) - Pedestrian wind comfort</b> Chair : Xuelin Zhang
	10:15 - 10:30	238 - Ge, Y., Xia, J., Zhao, L., Zhao, S.: 'Flutter stabilization of 5000m spanned suspension bridge with widely slotted twin-box girder' (p. Yaojun Ge)	580 - Aldoum, M., Stathopoulos, T.: 'Prediction of wind loads on buildings with non-rectangular plans based on Machine Learning regression models' (p. Murad Aldoum)	311 - Zhang, X., Yang, Q., Li, T.: 'Large eddy simulation of atmospheric boundary-layer flow in real complex terrains' (p. Xingxin Zhang)	89 - Kwon, S., Lee, S.: 'A new KOCED outdoor wind tunnel: full-scale destructive testing for category 3 typhoon' (p. Soon-Duck Kwon)	257 - Stedman, D., Vojjala, R.: 'Component-based Vulnerability of Large Facilities' (p. Derek Stedman)	467 - Yoshida, A., Katsumura, A.: 'Characteristics of wind forces acting on high-rise buildings with different corner shapes and side ratios' (p. Akihito Yoshida)	145 - Hirose, C., Ikegaya, N.: 'Pedestrian-level strong wind distribution within a simplified block array determined by particle image velocimetry' (p. Chiyoko Hirose)
	10:30 - 10:45	744 - Calamelli, F., Argentin, T., Diana, G., Rocchi, D., Rossi, R.: 'A non-linear approach to compute the aerodynamic response of a long-span bridge subjected to a non-synoptic wind' (p. Filippo Calamelli)	600 - Klepac, S., Subgranon, A., Olabarrieta, M., Zambon, J., He, R., Warrillow, J., Xue, Z., Bao, D., Ou, Y., Hunter, E.: 'Application of a data-driven machine learning framework for predicting hurricane damage to buildings in Hurricane Ian' (p. Arthriya Subgranon)	325 - Chang, R., Zhu, R., Zhao, D.: 'Strong wind characteristics of lower boundary layer (0-300 m) during the landfall of typhoon' (p. Rui Chang)	95 - Gavanski, E., Banks, D., Fewless, Y., Akon, A., Guha, T.: 'Solar tracker case study on the importance of high frequency spectrum matching for large scale models' (p. David Banks)	162 - Pham, H., Arul Jayachandran, M.: 'Exploring The Need for Developing Impact-based Forecasting for Extreme Wind Events in the US' (p. Huy Pham)	484 - Cai, K., Huang, M., Yang, C., Binbin, L.: 'Structural Modal Identification of tall Buildings based on Variational Mode Decomposition and Energy Separation Algorithm' (p. Chen Yang)	151 - Yang, T., Wang, W., Ikegaya, N.: 'Estimation of low-occurrence strong wind speed in an actual urban area using statistical methods with RANS results' (p. Tingjun Yang)
	10:45 - 11:00	335 - Cid Montoya, M., Kusano, I., Baldomir, A., Jurado, J., Hernández, S.: 'The Role and Capabilities of Aero-structural Optimization of Long-span Cable-Supported Bridges with Multi-box Deck' (p. Santiago Hernández)	704 - Sarkic Glumac, A., Jadhav, O., Bordas, S., Blocken, B.: 'A multi-fidelity machine learning framework for urban wind energy harvesting over a high-rise building' (p. Anina Sarkic Glumac)	347 - Jard, T., Snaiki, R.: 'Real-time Power Optimization of Floating Wind Farms via Platform Repositioning' (p. Timothé Jard)	516 - Ye, D., Kim, Y.: 'Effects of environmental conditions on pressures measurement via tubing systems: Experimental study' (p. Donghun Ye)	186 - Hu, F., Li, Q.: 'A physics-based tropical cyclone model for Western North Pacific Basin' (p. Feng Hu)	500 - Alanani, M., Elshaer, A.: 'AI-driven topology optimization framework for tall buildings subjected to dynamic wind excitation' (p. Ahmed Elshaer)	636 - Padayatchy, Y., Melbourne, W.: 'Assessment of Pedestrian Comfort Criteria using two different approaches for Melbourne, Australia' (p. Yogen Padayatchy)
	11:00 - 11:15	350 - Wu, F., Borri, C., Zhao, L., Ge, Y.: 'Aerodynamic analysis and safety counter measures to ensure runnability of a 3-box girder super-long span bridge' (p. Fengying Wu)	765 - Li, B., Spence, S.: 'Performance-based wind assessment of nonlinear systems through LSTM-based metamodeling and transfer learning' (p. Bowei Li)	401 - Kikuchi, Y., Ishihara, T.: 'Fatigue prediction of wind turbine high-tension bolts based on sophisticated aerodynamic and structural model' (p. Yuka Kikuchi)	262 - Kay, N., Buchanan, R., Richards, P., Stol, K.: 'Generating sinusoidal flow surges in a large closed-loop wind tunnel' (p. Nicholas Kay)	199 - Noda, M., Oda, H., Takemi, T.: 'Typhoon-Induced Roof Damage Probability Based on Aerial Survey and WRF' (p. Minoru Noda)	215 - Kim, Y.: 'Experimental investigation of aerodynamic characteristics of tall building with various aspect ratios' (p. Yong Chul Kim)	770 - Koss, H., Ratheiser, M., Lieb, R., Krus, H., Ruscheweyh, H.: 'WTG Guideline for the Assessment of Wind Comfort in urban Areas' (p. Holger Koss)
	11:15 - 11:30	835 - Barni, N., Ølseth, O., Petersen, Ø., Mannini, C.: 'Nonlinear buffeting modelling of a 2000 m long twin-deck suspension bridge' (p. Niccolò Barni)	821 - Rizzo, F., Caracoglia, L., Piccardo, G.: 'Enhancing the analysis of galloping instability by Artificial Neural Networks' (p. Giuseppe Piccardo)	462 - Fukushima, M., Ishihara, T.: 'Prediction of sea level pressure and ocean surface wind speed using mesoscale and typhoon models' (p. Masato Fukushima)	351 - Takeyama, M., Hattori, Y.: 'Visualization challenge for measuring 3D3C velocity of air flow by using rainbow PTV technique' (p. Mao Takeyama)	254 - Huang, P., Zhou, H., Lin, H.: 'Trajectories of plate-type wind-borne debris considering mass eccentricity' (p. Huailiang Zhou)	615 - Kilpatrick, J., Yakymyk, W., Garber, J.: 'Practical experience using modified architectural form to mitigate across-wind response of a supertall building' (p. John Kilpatrick)	
Break	11:30 - 11:45							
Technical Sessions		<b>MS-04 (2) / TS-03 - Super Long Span Bridges through Multi-Box-Deck solutions / Bridge aerodynamics</b> Chair : Giorgio Diana	<b>TS-06 (6) - Computational wind engineering</b> Chair : Jörg Franke	<b>TS-29 (3) - Wind energy</b> Chair : Tim De Troyer	<b>TS-28 (1) - Wind characteristics</b> Chair : Franklin Lombardo	<b>TS-18 (2) - Risk and damage</b> Chair : Acir Loredou-Souza	<b>TS-17 (1) - Pollutant dispersion</b> Chair : Alessio Ricci	<b>TS-22 (3) - Trains and vehicles</b> Chair : Jiaying Wang
	11:45 - 12:00	759 - Larsen, A., Vestergaard Larsen, S., Rønne, M.: 'Flutter stability of twin-box bridge decks' (p. Maja Rønne)	838 - Niu, Y., Younis, B.: 'Computation of vortex shedding with a spectrum-modified turbulence closure' (p. Yanwei Niu)	404 - Wang, W., Yao, Z.: 'Cut-corner prism piezoelectric energy harvester based on galloping enhancement mechanism' (p. Weizhe Wang)	33 - Fujiwara, K., Hattori, Y., Eguchi, Y.: 'A novel measurement method of dynamic deformation and wandering of a tornado-like vortex' (p. Kota Fujiwara)	157 - Fan, X., Zhang, X., Weerasuriya, A.: 'Respiratory droplets transmission in urban street canyons' (p. Xiaodan Fan)	165 - Carlo, O., Buccolieri, R., Salizzoni, P., Marro, M., Fellini, S., Palusci, O.: 'Experimental assessment of the effects of obstacles on pollutant dispersion in urban canyons' (p. Oliver S Carlo)	321 - Qin, P., Ricci, A., Blocken, B.: 'Aerodynamic force prediction on the DrivAer car model by CFD: Impact of turbulence modeling approach' (p. Peng Qin)
	12:00 - 12:15	707 - Hao, J., Xin, L., Feng, Y., Li, J., Wu, T.: 'Numerical Simulation of Bridge Response Under A Moving Downburst: Parameter Optimization Using Surrogate Model' (p. Lingfeng Xin)	627 - S. Pirooz, A., Moore, S., Carey-Smith, T., Turner, R.: 'Bias correction of wind forecasts using high-resolution NWP modelling' (p. Amir A. S. Pirooz)	442 - Zhang, Z., Huang, P., Bitsuamlak, G., Cao, S.: 'Power performance of wind turbines over consecutive hills' (p. Ziyu Zhang)	122 - Chmielewski, T.: 'Development of classification of maximum wind speeds in Poland with a description of their effects' (p. Tadeusz Chmielewski)	256 - Stedman, D., Datin, P., Mensah, A., Nouri, N., Vojjala, R.: 'Dynamic Roof Age Considerations in Catastrophe Modelling' (p. Peter Datin)	179 - Wang, F., Zhou, X.: 'Spatial source parameters estimation in urban environment using optimization method combined with adjoint equation simulated via large eddy simulation' (p. Fuyu Wang)	345 - Reymert, S., Ølseth, O., Petersen, Ø., Rönquist, A.: 'A field study of gusts critical to vehicle stability on bridges' (p. Sebastian Reymert)
	12:15 - 12:30	243 - Lystad, T., Fenerci, A., Ølseth, O.: 'Long-term extreme buffeting response in practical design of long-span bridges' (p. Tor Martin Lystad)	647 - Kawai, H., Tamura, T.: 'Wind pressure on a building located in high-rise building cluster - Broad region LES for actual building model -' (p. Hidenori Kawai)	474 - Al Jamal, F., Winkelmann, U., Kalender, C., Hoeffler, R.: 'Validation of URANS Simulations of a Small-Scale Vertical Axis Wind Turbine using OpenFOAM' (p. Faris Al Jamal)	137 - An, L., Alinejad, N., Kim, S., Jung, S.: 'Application of Deaves and Harris model for complex heterogeneous terrain' (p. Sungmoon Jung)	435 - Calotescu, I., Chitez, A., Birsan, M.: 'Wind damage catalogue of Romania 2013-2022: an overview' (p. Ileana Calotescu)	208 - Zhu, J., Zhou, X.: 'The influence of turn-on time of source on the estimation of source location and release rate in time-varying flow' (p. Zhu Jianjie)	377 - Zhang, J., Huang, F., Han, S.: 'Study on a control method of the wake of high-speed train with vortex generators' (p. Fengyi Huang)
	12:30 - 12:45	515 - Russo, S., Piana, G., Carpinteri, A.: 'On the simplified calculation of multi-box deck flutter derivatives' (p. Sebastiano Russo)	655 - Abbasi, M., Valger, S., Voss, U.: 'Evaluation of a model for vehicle induced turbulence for urban wind simulation' (p. Ursula Voss)	491 - Karthik Vel, E., Subramania Pillai, N., Cao, S.: 'Effect of Wind-Induced Vibration on Leading Edge Protuberance Vertical Axis Wind Turbine' (p. Karthik Vel E)	451 - Tang, S., Wang, K.: 'Comparative study on wind characteristic parameters of typhoons in offshore and coastal areas of China' (p. Shengming Tang)	445 - Roueche, D., Nakayama, J.: 'Using Bayesian Networks for Structured Learning from Post-Windstorm Building Performance' (p. Jordan Nakayama)	223 - Jia, H., Lin, C., Kikumoto, H.: 'Wind tunnel experiment on footprints of a block-arrayed urban canopy model in the neutrally stratified boundary layer' (p. Hongyuan Jia)	614 - Zhang, J., Xian, R., Ma, C.: 'Wind tunnel investigations on aerodynamic admittance of high-sided vehicles on a long-span bridge under crosswinds' (p. Jiaming Zhang)
	12:45 - 13:00	466 - Giaccu, G., Caracoglia, L.: 'Multi-unit gyroscopic stabilizer to control flutter of long-span bridges: sensitivity analysis' (p. Gian Felice Giaccu)		494 - Gayon, L., Dubois, R., Laurent, P., Bélier, P., Dupont, F., Redouté, J., Manto, V., Andrienne, T.: 'Aeroelastic measurements on a vertical axis wind turbine' (p. Thomas Andrienne)	481 - Picozzi, V., Akbaba, A., Avossa, A., Ricciardelli, F.: 'Parent population method for the assessment of return wind speeds: calibration from incomplete datasets' (p. Vincenzo Picozzi)			
	13:00-13:15			126 - Silveira, V., Gutiérrez, A.: 'Evaluating the Accuracy of WRF Simulations for Vertical Wind Profiles at Coastal Locations: A Comparison of Measurement Data and PBL Schemes' (p. Victor Silveira)				
	11:45 - 13:05	<b>Poster area (level -1)</b> <b>PS-03 - Poster session</b> Chairs: Bernardo Nicese & Francois Rigo						
Lunch Break	13:00 - 14:00							

(\*): The session will start 5 min prior to the scheduled time

WEDNESDAY 30th	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session	14.00 - 15.15	<b>Keynote Session F</b> <b>Yoshihide Tominaga</b> 'CFD simulations of turbulent flow and dispersion in urban and nonurban environments: A perspective review' Chair : Maria Vittoria Salvetti						
Coffee Break	15.15 - 15.45							
Technical Sessions		<b>TS-02 (8) - Bluff body aerodynamics</b> Chair : Gianni Bartoli	<b>TS-34 (1) - Data driven techniques/methods in wind engineering</b> Chair : Wenhan Yang	<b>MS-06 - 2021 devastating tornadoes in USA (*)</b> Chair : Guirong Yan	<b>MS-01 (3) - THUNDERR (G. Solari Memorial session)</b> Chair : Maria Pia Repetto	<b>TS-33 - Combined wind, surge and wave effects</b> Chair : Enzo Marino	<b>TS-04 (1) - Cables</b> Chair : Olivier Flamand	<b>TS-24 - Ventilation</b> Chair : Girma Bitsuamlak
	15:45 - 16:00	734 - Nguyen, C., Lasagna, D., Xie, Z.: 'Large-eddy simulations of wind flow passing a building cluster' (p. Alessio Ricci)	25 - Ke, Y., Lin, P., Tse, T., Hu, G.: 'Machine learning-based prediction and optimization of wind effects on high-rise buildings: Review' (p. Yanyu Ke)	560 - Moon, S., Lombardo, F.: 'Effects of complex terrain on the near-surface wind field of 10 December 2021 Kentucky tornado' (p. Sung Min Moon)	330 - Mariotti, A., Lunghi, G., Brusco, S., Piccardo, G., Salvetti, M.: 'Effect of the accelerating flow on a square cylinder' (p. Maria Vittoria Salvetti)	510 - Chowdhury, A., Elawady, A., Fritz, H., Gorle, C., Kijewski-Correa, T., Gurley, K., Lomonaco, P., Lombardo, F., Masters, F., Taylor, K., van de Lindt, J., Vasilescu, P., Zisis, I.: 'Design of a National Full-Scale Testing Infrastructure for Community Hardening in Extreme Wind, Surge, and Wave Events (NICHE)' (p. Raül Cal)	370 - Liu, Z., Zhang, R., Chen, Z.: 'High-mode Vortex-induced Vibration of Stay Cables: Field Measurements, Experiments and Aerodynamic Countermeasures' (p. Zhiwen Liu)	204 - Jayakumari, A., Gillmeier, S., Guichard, R., Ricci, A., Blocken, B.: 'Wind effects on mechanically ventilated asbestos containment zone' (p. Anjali Radhakrishnan Jayakumari)
	16:00 - 16:15	726 - Schewe, G., Braune, M., van Hinsberg, N., Mai, H.: 'Reynolds number effects in flow around a pair of circular cylinders in crossflow up to Re=10 <sup>4</sup> ' (p. Marc Braune)	30 - Wang, Z., Zhang, Z.: 'Deep data mining and prediction of vortex-induced vibration of circular cylinders' (p. Zhen Wang)	606 - LaDue, J., Levitan, M., Lombardo, F., Wurman, J., Brown-Giammanco, T., Haan, F., Karstens, C., Wood, R., Kopp, G., Roueche, D., Standohar-Alfano, C., Scott, P., Robinson, J.: 'Standardizing methods of estimating wind speeds: The ASCE Wind Speed Estimation Committee' (p. James LaDue)	352 - Zhang, S., Yang, Q., Canepa, F., Burlando, M.: 'Vertical time-space evolution of wind field and temperature during the thunderstorm event on June 10, 2016 in Beijing' (p. Shi Zhang)	687 - Fercak, O., Bossuyt, J., Ali, N., Cal, R.: 'Decoupling Wind-Wave-Wake Interactions in a Fixed-Bottom Offshore Wind Turbine' (p. Raül Cal)	78 - Yuanyuan, W., Li, S., Kai, Q.: 'Experimental investigations on effectiveness of viscous and viscous inertial dampers on reducing the multimodal vibrations of stay cables' (p. Yuan Yuan Wang)	252 - Hobeika, N., García-Sánchez, C., Bluysen, P.: 'Validation of different Eulerian and Lagrangian solvers of aerosol dispersion in indoor spaces' (p. Nadine Hobeika)
	16:15 - 16:30	756 - Zhang, Z., Kareem, A., Xu, F.: 'Instability mode in flow fields around rectangular prisms' (p. Zhanbiao Zhang)	561 - Ojeda-Tuz, M., Chauhan, M., Catarelli, R., Shields, M., Gurley, K.: 'Equivalent turbulence profiles from randomized terrain in a boundary layer wind tunnel and its effects on pressure coefficients' (p. Mariel Ojeda-Tuz)	213 - Miller, C., Kopp, G.: 'Validation of an analytical model for estimating debris trajectories in a tornadic wind field' (p. Connell Miller)	708 - Canepa, F., Burlando, M., Repetto, M.: 'Thunderstorm outflows in the Northern Mediterranean area' (p. Massimiliano Burlando)	630 - Beeman, M., Hwang, H., Gorle, C.: 'Validating multiphase numerical simulation of shoaling waves impacting a cylinder' (p. Max Beeman)	171 - An, M., Li, S., Chen, Z.: 'Experimental Study on Aerodynamic Countermeasure for Galloping Vibration of Stay Cables Attached with Lamps: Perforated Shrouds' (p. Miao An)	341 - Chu, C.: 'An Integrated Model for Wind-Driven Natural Ventilation of Buildings' (p. Chia Ren Chu)
	16:30 - 16:45	799 - Lander, D., Letchford, C.: 'Towards understanding the effects of freestream turbulence on separation bubble dynamics beyond integral parameters' (p. Daniel Lander)	743 - Kim, S., Lee, S.: 'A label-free approach for detecting vortex-induced vibration using synthetic data augmentation' (p. Sunjoong Kim)	552 - Brown-Giammanco, T., Marshall, T., Krautwurst, S., de Toledo, N., LaDue, J., Levitan, M.: 'Changes in tornado intensity ratings' (p. Tanya Brown-Giammanco)	390 - Lombardo, F.: 'Current field perspective of thunderstorm-generated near-surface winds' (p. Franklin Lombardo)	638 - Hwang, H., Gorlé, C.: 'Towards high-fidelity large-eddy simulation of extreme wind/wave events in coastal regions' (p. Hanul Hwang)	206 - Chang, Y., Zhao, L., Ge, Y.: 'Optimization of aerodynamic measures for rain wind induced vibration and its effect on engineering design of stay cables' (p. Ying Chang)	411 - Xia, L., Ricci, A., Qin, P., Blocken, B.: 'Experimental and numerical analysis of aerosol concentration in a multi-zone ventilated indoor environment' (p. Lili Xia)
	16:45 - 17:00	822 - Shang, J., Zhou, Q., Wang, Q.: 'Numerical studies on spacing ratio effects of two tandem square cylinders with different chamfered-corner ratios' (p. Shang Jingmiao)	82 - Huang, Y.: 'Predicting pressure coefficients on low-rise buildings using deep neural networks' (p. Youqin Huang)	635 - Haan, F., Huyser, A.: 'Estimating wind speeds for unique wind damage events by combining multiple damage survey data sets in the cloud' (p. Andrew Huyser)	717 - Hangan, H., Canepa, F., Burlando, M., Romanic, D.: 'Modelling of downbursts based on physical experiments' (p. Horia Hangan)	686 - Wang, J., Larose, G., Costa, B.: 'Wave-induced wind turbulence - experimental results of combined wind and wave conditions in a Norwegian fjord' (p. Jungao Wang)	221 - Kimura, K., Yoshida, K., Nishimura, H., Ohdo, K.: 'Measurement of unsteady pressure distribution on an inclined circular cylinder during dry galloping' (p. Kichiro Kimura)	482 - Hu, H., Son, I., Kikumoto, H.: 'Study on natural ventilation control by optimizing fluid diode plates based on Tesla valve for building windows' (p. Hong Hu)
17:00 - 17:15	432 - Mulyanto, J., Wang, Z., Zheng, C.: 'Surrogate Model Updating-based Aerodynamic Shape Optimization of a Triangular Cylinder with Corner Recession Modification' (p. Joshua Adriel Mulyanto)	50 - Wang, Y., Liu, Z., An, X.: 'Wind turbine damper optimization using machine learning technologies considering wake effects' (p. Yize Wang)	809 - Dang, J., Helmig, R., Zhao, Y., van de Lindt, J., Do, T., Orf, L., Yan, G.: 'Reproducing the Community Damage Induced by the 2021 Midwest Tornado Outbreak using Combined CM1 and CFD Simulations' (p. Grace Yan)		234 - Tang, G., Guo, J., Zhao, T., Zhang, T., Yang, Z.: 'The impact of utility-scale solar photovoltaic power stations on the near-surface wind flow in a desert area' (p. Guodong Tang)		737 - Lingfeng, S., Xu, H.: 'Numerical investigation on the combined effect of the stack effect and wind pressure of a high-rise office building' (p. Su Lingfeng)	
Break	17:15 - 17:30							
Technical Sessions		<b>TS-02 (9) - Bluff body aerodynamics</b> Chair : Daniel Lander	<b>TS-06 (7) - Computational wind engineering</b> Chair : DongHun Yeo	<b>TS-03 (7) - Bridge aerodynamics</b> Chair : Hiroshi Katsuchi	<b>TS-04 (2) - Cables</b> Chair : Christos T. Georgakis	<b>TS-10 (2) - Lattice towers and transmission lines</b> Chair : Richard Flay	<b>TS-17 (2) - Pollutant dispersion</b> Chair : Bert Blocken	<b>TS-05 (1) - Codes and standards</b> Chair : Svend Ole Hansen
	17:30 - 17:45	16 - Hémon, P.: 'Unsteady aerodynamics of circular cylinder: a field observation compared with wind tunnel models' (p. Pascal Hémon)	677 - Niedzielska, U., Rohr, C.: 'Some limitations of built-in OpenFOAM ABL formulations for wind engineering applications' (p. Urszula Niedzielska)	864 - Meinhardt, C., Bottoni, F.: 'Damping Estimation of Long-span Bridges to assess the effectiveness of TMDs to reduce Vortex Shedding Induced Deck Oscillations' (p. Christian Meinhardt)	557 - Tianyi, L., Hao, W., Piccardo, G., Zidong, X., Gao, H., Zhang, H.: 'Experimental Investigation of Vortex-Induced Vibration Characteristics on Dual Circular Cylinders in Tandem' (p. Tianyi Lang)	338 - Alawode, K., Elawady, A., Chowdhury, A.: 'Dynamic response of a tall transmission tower under downburst-like outflows' (p. Kehinde Alawode)	395 - Raghunathan Srikumar, S., Mosca, G., Cotteleer, L., Parente, A., Gambale, A.: 'CFD-based investigation of air quality in urban areas: A case study in Brussels, Belgium' (p. Sampath Kumar Raghunathan Srikumar)	19 - Mostafa, K., Zisis, I., Stathopoulos, T.: 'An empirical model for wall-soffit pressure coefficients on a low-rise building' (p. Karim Mostafa)
	17:45 - 18:00	21 - Xiao, D., Lou, X., Zhou, T., Zhu, H.: 'Experimental study on the near wake characteristics of an inclined square cylinder' (p. Tongming Zhou)	705 - Vranešević, K., Sarkić Glumac, A.: 'Impact of surroundings on the local peak pressure in high-rise building clusters' (p. Kristina Vranešević)	383 - Dorigatti, F., Dallaire, P., Larose, G., Mattiello, E.: 'Experimental and numerical analyses of the effects of complex topography and tree canopy on the wind responses of the CNW cycling-pedestrian bridge' (p. Francesco Dorigatti)	639 - Jing, H., Zhang, J., Yu, C.: 'Numerical study on aerodynamic characteristics and flow field of a circular cylinder equipped with a C-ring behind' (p. Hongmiao Jing)	596 - Ahmed, A., El Damatty, A.: 'Comparison between ASCE-74 Tornado Load Cases and Synoptic Wind Loads for Transmission Lines' (p. Ashraf El Damatty)	450 - Tachibana, T., Yoshie, R., Nakayama, S., Kishida, T., Miyashita, K., Sasaki, R.: 'Comparison between field measurement and wind tunnel experiments of gas dispersion in an urban area and verification of similarity law' (p. Takumi Tachibana)	332 - Chowdhury, J., Banks, D.: 'Importance of approach flow conditions on gust factor' (p. Jubayer Chowdhury)
	18:00 - 18:15	620 - Tan, Z., Chen, X., Zhu, L.: 'Characteristics of wind load on a 3:2 rectangular cylinder in accelerating flows' (p. Zhongxu Tan)	738 - Vasan, N., Saneinejad, S.: 'State of the art in wind consulting: A perspective on the application of current advances in CFD and AI' (p. Rose Babael)	405 - Lei, W., Wang, Q.: 'Study on the performance of MTMDI in mitigating vortex-induced vibration of parallel bridges' (p. Wei Lei)	651 - Zhang, J., Hua, X., Chen, Z., Xu, J.: 'Wind-induced vibrations of twin tandem cables in parallel and non-parallel arrangements' (p. Jiabin Zhang)	665 - Yang, S., Li, S., Gong, S.: 'Capacity of transmission towers in a transmission line under typhoon wind loads' (p. Shucheng Yang)	530 - Nixaridis, C., Cotteleer, L., Gambale, A., De Troyer, T., Parente, A.: 'Dimensionality reduction for pollutant forecasting on a real urban area test case' (p. Christos Nixaridis)	553 - Sauder, H., Banks, D.: 'Wind directionality factor for solar ground mount' (p. Heather Sauder)
18:15 - 18:30	56 - Zhang, B., Zhou, L., Tse, T.: 'Extended Spectral Proper Orthogonal Decomposition for Identifying the Correlated Structures in Building Surface Pressure and Surrounding Flow Fields' (p. Bingchao Zhang)		250 - Geleta, T., Bitsuamlak, G.: 'Characteristics of separated shear layer and its relationship with the underlying surface pressure - A CFD approach' (p. Tsinuel Geleta)	113 - D'Auteuil, A., McTavish, S., Raesi, A., Szilder, K.: 'Effect of cable-surface geometry on the aerodynamic behaviour of stay cables under dry-wind and ice-wind conditions' (p. Annick D'Auteuil)	698 - Zhang, Y., Wang, D., Sun, C., Liu, Z., Yang, L.: 'Frequency domain assessment of the extreme responses of transmission tower under moving downburst' (p. Dahai Wang)	584 - Ono, A., Nozu, T.: 'Large-eddy simulation of concentration fluctuations in an actual urban area' (p. Azusa Ono)	758 - Picozzi, V., Malasomma, A., Avossa, A., Ricciardelli, F.: 'Investigation of uncertainties in pressure coefficients for flat roofs of low-rise buildings' (p. Antonio Malasomma)	

(\*): The session will start 5 min prior to the scheduled time

THURSDAY 31st	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Plenary Session	8:30 - 9:45	<b>Thematic Session D</b> 'The permanent crossing of the Messina Strait' Chair : Claudio Borri						
Coffee Break	9:45 - 10:15							
Technical Sessions		<b>TS-06 (8) - Computational wind engineering</b> Chair : Alessandro Mariotti	<b>TS-03 (8) - Bridge aerodynamics</b> Chair : Daniele Rocchi	<b>TS-14 (3) - Non-synoptic wind effects</b> Chair : Han-Ping Hong	<b>TS-31 (2) - Wind tunnel techniques</b> Chair : Tommaso Massai	<b>TS-07 (3) - Field measurements</b> Chair : Vincenzo Sepe	<b>TS-11 (2) - Low-rise buildings</b> Chair : Ted Stathopoulos	<b>TS-32 - Any other issue</b> Chair : Hrvoje Kozmar
	10:15 - 10:30	673 - Pomaranzi, G., Marykovskiy, Y., Schito, P., Zasso, A.: 'Modelling Permeable Double Skin Façades as Porous Medium' (p. Giulia Pomaranzi)	604 - Ma, C., Li, Q.: 'Research on buffeting force spatial correlation of box girder based on pressure measurement test of full bridge aeroelastic model' (p. Qinfeng Li)	716 - Orlando, A., Pagnini, L., Repetto, M.: 'Equivalent Synoptic Wind to reproduce non-synoptic wind effects on vertical slender structures' (p. Andrea Orlando)	312 - Liu, J., Hu, G., Tse, T.: 'A comprehensive database: synchronization sampling of pressure field on rectangular cylinder surface and velocity field around rectangular cylinder' (p. Junle Liu)	123 - Daniotti, N., Bogunović Jakobsen, J., Snæbjörnsson, J., Cheynet, E.: 'Turbulence in the near wake of a full-scale long-span bridge' (p. Etienne Cheynet)	237 - Eissa, M., Elawady, A., Zisis, I.: 'Evaluation of extreme value estimation methods based on statistical inference of wind pressure coefficient behavior for low-rise buildings' (p. Mohamed Eissa)	153 - Zhang, T., Zhou, X.: 'CFD simulations of snow saltation on flat terrain' (p. Tiange Zhang)
	10:30 - 10:45	527 - Khaled, F., Chen, G., Lombardo, F.: 'An innovative computational approach to generate tornado-like vortices using large eddy simulation (LES)' (p. Faiaz Khaled)	610 - Chen, X., Xian, R., Ma, C.: 'Study on mass-damping characteristics of typical cross-section elastic suspension system in still air' (p. Xin Chen)	572 - Ahmed, M., El Damatty, A., Dal, K., Yu, S.: 'Behaviour of Wind Turbine Farms under Downbursts' (p. Shaoqing Yu)	286 - Zhang, X.: 'Similarity study of smoke movement from photovoltaic panel roof fire with wind effect' (p. Xin Zhang)	757 - Nafisifard, M., Bogunović Jakobsen, J., Snæbjörnsson, J., Sjöholm, M., Mann, J.: 'Triple-lidar observations of flow around a bridge deck' (p. Mohammad Nafisifard)	255 - Xin, J., Cao, J., Cao, S.: 'Comparison of tornado-induced wind pressures on Multi-span Gable-roof and Sawtooth-roof industrial buildings' (p. Jiachen Xin)	235 - Cid Montoya, M., Rubio-Medrano, C., Kareem, A.: 'A first look at cybersecurity of structures under wind' (p. Miguel Cid Montoya)
	10:45 - 11:00	774 - Ma, T., Sun, C., Miller, P.: 'Large eddy simulation of extreme nonstationary hurricane winds via a hurricane boundary layer model' (p. Tianqi Ma)	648 - Kusano, I., Baldomir, A., Bogunović Jakobsen, J., Keane, A., Jurado, J., Snæbjörnsson, J.: 'Multi-fidelity aerodynamic shape optimization of suspension bridge deck with railings and vortex mitigation devices' (p. Ibuki Kusano)	613 - Žužul, J., Ricci, A., Burlando, M.: 'CFD reconstruction of the thunderstorm downburst event of the August 14, 2018 in Genoa (Italy)' (p. Josip Žužul)	365 - Akon, A., Gavanski, E., Fewless, Y.: 'Wind tunnel solar model design - Best practices' (p. Abul Fahad Akon)	594 - Hochschild, J., Gorlé, C.: 'Comparison of full-scale and LES-predicted peak pressures on the Space Needle' (p. Catherine Gorlé)	314 - Mejia, A., Ahmed, F., Elawady, A., Chowdhury, A.: 'Downburst aerodynamic loading effects on low-rise building' (p. Alvaro Mejia)	268 - Ge, Y., Cao, Z., Sun, Y.: 'Characteristics of internal pressures of cylindrical roof structures with rectangular openings' (p. Yuhang Ge)
	11:00 - 11:15	797 - Bretkopf, S., Hartz, C.: 'Development of wind tunnel and numerical simulations for the flow around a circular cylinder over a large range of Reynolds numbers' (p. Sophie Bretkopf)	302 - Bronkhorst, A., Geurts, C., Akhouch, J., van Uffelen, M.: 'Wind tunnel study of global wind loads on a swing bridge' (p. Alexander Johannes Bronkhorst)	619 - Yahya, D., Roueche, D., Lombardo, F., Chen, G.: 'Exploiting Videos to Estimate Near-Surface Wind and Debris Speed during Non-Synoptic Wind Events' (p. Daniel Yahya)	156 - Trush, A., Pospisil, S.: 'Parametric snow generator for closed circuit wind tunnel' (p. Arsenii Trush)	710 - Zhang, J., Lebar, A., Sridhar, S., Subramanian, C., Pinelli, J., Lazarus, S., Wang, J.: 'A Field Study of Wind Pressure Loads on Building Components during Hurricanes Ian and Nicole' (p. Jean-Paul Pinelli)	592 - Merhi, A., Morrison, M., Brown-Giammanco, T.: 'Wind performance and vulnerabilities of garage doors' (p. Murray Morrison)	386 - Rodrigo Tondo, G., Kavrakov, I., Morgenthal, G.: 'Aerodynamic force reconstruction using physics-informed Gaussian processes' (p. Gledson Rodrigo Tondo)
	11:15 - 11:30	806 - Ahmed, E., Montazeri, H., El Damatty, A.: 'CFD analysis of double-curvature roof using RANS and SAS' (p. Ashraf El Damatty)	659 - Li, W., Li, X., Niu, H., Patruno, L., Hua, X.: 'Experimental and numerical investigations on the aerodynamic admittance of twin-box bridge decks' (p. Weilin Li)	371 - Roncallo, L., Tubino, F.: 'A closed-form solution for the thunderstorm gust response factor' (p. Luca Roncallo)	124 - Franco, I., Cataldo, J., Gutierrez, A.: 'Twin jets trajectory and topology' (p. Ignacio Franco)	731 - Yang, Y.: 'Study of wind field for urban high-rise building based on Lidar measurement and wind tunnel test' (p. Yi Yang)	511 - Cai, K., Huang, M., Kareem, A.: 'Comparison of Fractal Dimension Estimation Methods for Typhoon Wind Speeds' (p. Kang Cai)	
Break	11:30 - 11:45							
Technical Sessions		<b>TS-06 (9) - Computational wind engineering</b> Chair : Luca Patruno	<b>TS-03 (9) - Bridge aerodynamics</b> Chair : Ledong Zhu	<b>TS-14 (4) - Non-synoptic wind effects</b> Chair : Massimiliano Burlando	<b>TS-31 (3) - Wind tunnel techniques</b> Chair : Francesca Lupi	<b>TS-18 (3) - Risk and damage</b> Chair : Kazuyoshi Nishijima	<b>TS-11 (3) - Low-rise buildings</b> Chair : Christopher Letchford	
	11:45 - 12:00	840 - Wang, X., Xu, F., Mannini, C.: 'LES simulation of the effect of yaw angle on VIV response of a 4:1 rectangular cylinder' (p. Xu Wang)	663 - Wu, B., Liao, H., Shen, H.: 'Aerodynamic Mechanisms of Nonlinear Flutter with Subcritical Hopf Bifurcation of a Bridge Girder' (p. Bo Wu)	653 - Bin, H., Brusco, S., Piccardo, G.: 'Effects of the time-varying wind angle of attack on the aerodynamic loading of a two-dimensional square cylinder' (p. Hao-Yu Bin)	394 - Metwally, O., Elawady, A., Zisis, I.: 'Use of optimization technique for design of scaled aeroelastic model for wind tunnel testing' (p. Omar Metwally)	803 - Shakya, A., Pang, W., Stoner, M., Song, Y., Albright, D., Bhowmik, S., Chen, S., Hall, E.: 'Housing damage, loss, and shelter need estimations using an ensemble of return period consistent tropical storms' (p. Adish Deep Shakya)	579 - Vargiomezis, T., Gorle, C.: 'LES predictions of wind loads on a low-rise building in an urban area' (p. Themistoklis Vargiomezis)	
	12:00 - 12:15	458 - Feng, Y., Liu, Z., Chen, Z.: 'Numerical simulation of vehicle-induced loads on fully enclosed sound barrier' (p. Yaoheng Feng)	664 - Huang, Z., Ma, W., Hua, X., Chen, Z., Wan, T., Wen, Q.: 'Experimental studies on suppression of vertical vortex-induced vibrations of an edge girder bridge by mechanical and aerodynamic countermeasures' (p. Zhiwen Huang)	688 - Mengistu, M., Repetto, M.: 'Validation of numerical and analytical methods of downburst wind load calculation through full-scale monitoring' (p. Mekdes Tadesse Mengistu)	547 - Catarelli, R., Pinyochotiwong, Y., Masters, F., Phillips, B., Chen, T., Bridge, J., Gurley, K.: 'Advancements in the physical simulation of atmospheric surface layer flows using synthetic turbulence modulation in a large boundary layer wind tunnel' (p. Ryan Catarelli)	810 - Wu, D., Yu, X., Cheng, L., Li, J., Thompson, P.: 'A simplified statistical method for preliminary regional typhoon risk assessment based on best track data' (p. Dengguo Wu)	549 - Nasreldin, M., Fernández-Cabán, P., Khan, S.: 'Terrain-induced and large-scale turbulence effects on the performance of wind mitigation strategies for low-rise buildings' (p. Pedro Fernández-Cabán)	
	12:15 - 12:30	570 - Potsis, T., Stathopoulos, T.: 'Computational evaluation of peak wind induced pressures on buildings' (p. Theodore Potsis)	329 - Zhu, J., Yang, Y., Zhang, J., Xu, H.: 'An Investigation to Effect Mechanism of High-order Modes on 3D Coupled Flutter with Modality-driven Method' (p. Jinbo Zhu)	690 - Lo, Y., Li, Y., Wu, C., Tsai, M.: 'Transient aerodynamic forces of 2D rectangular prisms under accelerating and decelerating flows' (p. Yuan-Lung Lo)	554 - Hedayati, F., Merhi, A., Morrison, M.: 'Reconstruction of wind field measurements: a machine learning approach' (p. Faraz Hedayati)	542 - Ibrahim, H., Elawady, A., Prevatt, D.: 'Risk and Fragility Assessment of Residential Elevated Buildings Using an Empirical Approach' (p. Amal Elawady)	761 - Goyal, R., Moizuddin, M., Matsui, M.: 'Evaluation of wind pressure on low-rise building projections and surrounding terrain under the influence of tornado like flow' (p. Rajesh Goyal)	
	12:30 - 12:45		709 - Petersen, Ø., Zhang, M., Ølseth, O.: 'Integrated aerodynamic and structural optimization of a suspension bridge with an aluminum girder using surrogate models' (p. Øyvind Wiig Petersen)	695 - Li, Y., Lo, Y., Mason, M.: 'Aerodynamic characteristics of high-rise buildings under nose-like velocity profiles' (p. Yang Li)	682 - Liu, J., Li, S.: 'Experimental study on dynamic response influence factors of flexible photovoltaic support structure' (p. Jiaqi Liu)	801 - Bedwell, C., Gurley, K., Pinelli, J., Silva de Abreu, R., Wei, Z.: 'Accumulation of damage in a hurricane vulnerability model of Florida residential construction' (p. Jean-Paul Pinelli)	764 - Geetha Rajasekharan, S., Matsui, M., Sarkar, P., Cao, S.: 'Benchmark studies on a building model exposed to tornado-like flow in three different simulators' (p. Sabareesh Geetha Rajasekharan)	
	12:45 - 13:00	506 - Gambale, A., Raghunathan Srikumar, S., Mosca, G., Tsionas, I., Ulagano-Munitxa, M., Stephan, A.: 'A data-driven surrogate model framework based on CFD simulations to accelerate wind energy yield assessment' (p. Sampath Kumar Raghunathan Srikumar)	714 - Mei, Z., Zhao, L., Ge, Y.: 'Nonlinear flutter mechanism of typical box sections with energy maps' (p. Zheyuan Mei)	534 - Cao, J., Qin, Y., Cao, S.: 'Aerodynamic mechanisms of tornado-induced wind load on a high-speed train' (p. Jinxin Cao)			99 - Parackal, K., Omelaniuk, A., Henderson, D., Ginger, J.: 'Wind Loads on Flush-Mounted Rooftop Solar Panels and Supporting Structural Elements' (p. Korah Parackal)	
Lunch Break	13:00 - 14:00							

THURSDAY 31st	Time scheduling	Auditorium	Verde Room	Limonaia Room	Room Onice	Room 4	Room 9	Room 6
Technical Sessions		<b>TS-34 (2) - Data driven techniques/methods in wind engineering</b> Chair : Catherine Gorlé	<b>TS-03 (10) - Bridge aerodynamics</b> Chair : Claudio Mannini	<b>TS-29 (4) - Wind energy</b> Chair : Alberto Zasso	<b>TS-28 (2) - Wind characteristics</b> Chair : Etienne Cheynet	<b>TS-18 (4) - Risk and damage</b> Chair : Klaus Thiele	<b>TS-17 (3) - Pollutant dispersion</b> Chair : Naoki Ikegaya	<b>TS-05 (2) - Codes and standards</b> Chair : Francesco Ricciardelli
	14:00 - 14:15	577 - Li, X., Repetto, M.: 'Machine learning identification of thunderstorm outflow events from anemometric records' (p. Xiao Li)	725 - Zhao, X., Li, J., Wu, M.: 'Aerodynamic stability of super-long-span L-shaped wind fairing steel box girder suspension bridge' (p. Xue Zhao)	828 - Ferri, G., Marino, E.: 'Effects of platforms and moorings concepts on the dynamics of floating offshore wind turbines' (p. Giulio Ferri)	496 - Ding, Y., Cui, W., Zhao, L., Fang, G., Ge, Y.: 'Non-stationary characteristics of field measured gust in high altitude deep canyon' (p. Yejun Ding)	544 - Rittelmeyer, B., Roueche, D.: 'Fragility-Based Sensitivity Analysis Framework for Load Paths Subjected to Wind Hazards' (p. Brandon Rittelmeyer)	616 - Kavian Nezhad, M., Lange, C., Fleck, B.: 'Analysis of the urban non-uniformities influence on pollutant dispersion patterns emitting from roof-based sources using a tuned RANS closure' (p. Mohammad Reza Kavian Nezhad)	629 - S. Pirooz, A., Moore, S., Stuart, S., Turner, R.: 'Potential effects of climate change on design wind speed estimates using dynamical downscaling of RCMs' (p. Richard Turner)
	14:15 - 14:30	518 - Ma, T., Cui, W., Zhao, L., Ge, Y.: 'Aerodynamic Function Learner (AFL): Data-based autonomy discovering framework for nonlinear form aerodynamic equations' (p. Teng Ma)	727 - Zhou, Q., Qin, C., Li, M.: 'Experimental studies on the vortex-induced vibration of parallel $\Pi$ -shaped composite decks' (p. Qiang Zhou)	550 - Liu, G., Yang, Q.: 'A yawed wake model to predict the velocity distribution of curled wake cross-section for wind turbines' (p. Guangyi Liu)	541 - Li, T., Tang, S., Li, Y.: 'Characteristics of wind speed profiles through numerical studies of Super Typhoon Lekima (2019)' (p. Tiantian Li)	583 - Tomokiyo, E., Nishijima, K., Takeuchi, T., Takahashi, T.: 'Rapid Repair Demand Estimation Method for Damaged Residential Roofs Under Wind Disaster Using Remote Sensing Images and Machine Learning' (p. Eriko Tomokiyo)	747 - Yoshie, R., Tachibana, T., Xuan, Y.: 'Investigation of atmospheric stability in Tokyo using observational data and analysis data by WRF' (p. Ryuichiro Yoshie)	674 - Fu, C., Lo, Y., Wang, J.: 'Estimation biases of design wind speed due to mean occurrence rate in the Poisson process assumption' (p. Chung-Lin Fu)
	14:30 - 14:45	522 - Tinmitonde, S., Yan, L., He, X., Zhu, L.: 'Data-driven optimization of the aeroelastic performance of Long-span suspension bridge based on Bayesian modeling' (p. Severin Tinmitonde)	771 - Heremans, J., Dimitriadis, G., Denoël, V.: 'An arc-length continuation process for flutter solutions.' (p. Julien Heremans)	605 - Wu, Y., Lin, C.: 'Effects of lateral turbine spacing and inflow turbulence on the power generation of large wind farms: An LES study' (p. Yu-Ting Wu)	723 - Calotescu, I., Canepa, F., Repetto, M., Burlando, M.: 'Similarities and differences between thunderstorm outflows measured in Italy and Romania' (p. Maria Pia Repetto)	781 - Kim, S., Ding, F., Spence, S.: 'Wind-borne debris damage estimation for clusters of buildings based on machine learning and CFD simulations' (p. Seymour Spence)	855 - de Moraes, L., Furieri, B., Santos, J., Nascimento, E., Harion, J.: 'Dispersion and deposition of particulate matter emitted by stockpiles of granular material: a numerical approach using LES' (p. Cristina Lima de Moraes)	700 - Frølund Østbirk, S., Ole Hansen, S.: 'Across-wind loads on tall buildings - Prescriptions of the upcoming Eurocode revision and wind tunnel test results' (p. Søren Frølund Østbirk)
	14:45 - 15:00	38 - Butt, D., Miller, C., Kopp, G.: 'Automated large-scale tornado treefall detection and directional analysis using machine learning' (p. Daniel Butt)	779 - Liao, H., Wang, Q., Huang, L., Lei, W.: 'Wind-resistance design of Zhangjingao south channel bridge: a suspension bridge with 2300m main span' (p. Qi Wang)	827 - Ferri, G., Liu, D., Heo, T., Marino, E., Manuel, L.: 'On long-term fatigue damage estimation for a floating offshore wind turbine using a surrogate model' (p. Giulio Ferri)	740 - Gebray, P., Bayray, M., Van Schaebroeck, B., Abadi, H., Nysen, J., Termonia, P.: 'Validation of the ERAS reanalysis surface winds over Ethiopia' (p. Petros Gebray Enday)	782 - Radhika, S., Daga, P., Marathe, A., Tamura, Y.: 'Tornado Speed Estimation from a Laterally Captured Video Sequence using Machine Learning' (p. Radhika Sudha)	301 - Lin, X., Fu, Y., Li, C., Tse, T.: 'Identifying dominant flow field features in an isolated street canyon: a data-driven analysis procedure' (p. Xisheng Lin)	823 - Manica, P., Nguyen, T., Faseli, F., Kumaresan, S.: 'Along-wind loads on box isolated tall buildings: Performance of international standards' (p. Pietro Manica)
15:00 - 15:15		807 - Verma, S., Cid Montoya, M., Mishra, A.: 'Shape- and Frequency-Dependent Self-Excited Forces Emulation for the Aero-Structural Design of Bluff Decks' (p. Miguel Cid Montoya)	623 - Wang, Y., Yang, Q., Li, T.: 'Three-dimensional typhoon wind simulating for parked wind turbines' (p. Yu Wang)	829 - Mac Reamoinn, R., Opsomer, A., Ramponi, R.: 'Comparative study of surface wind speeds and gusts from filed measurements of low-rise buildings and terrain adjusted synoptic wind observations' (p. Reamonn Mac Reamoinn)			832 - Loredo-Souza, A., Pfeil, M., Nascimento, E., Riera, J., Fisch, G., Beck, A.: 'Alternative basic wind speed maps for the Brazilian wind code based on a climatological approach' (p. Acir Loredo-Souza)	
Coffee Break	15:15 - 15:45							
Technical Sessions		<b>TS-34 (3) - Data driven techniques/methods in wind engineering</b> Chair : Gang Hu	<b>TS-08 (4) - High-rise buildings</b> Chair : Kenny Kwok	<b>TS-29 (5) - Wind energy</b> Chair : Cornelia Kalender	<b>TS-01 (2) - Aeroelastic effects</b> Chair : Tommaso Argentini	<b>TS-07 (4) - Field measurements</b> Chair : Aksel Fenerci	<b>TS-16 (3) - Performance-Based Wind Engineering</b> Chair : Ruediger Hoeffler	
	15:45 - 16:00	438 - Liu, P., Cui, W., Zhao, L., Ge, Y.: 'Buffeting forecasting of a long-span bridge based on wind field monitoring data and twin LSTM recurrent neural network method' (p. Peng Liu)	624 - Wu, J., Xie, Z., Zhang, Z.: 'Wind effect and aerodynamic wind resistance measures of a 257m apartment building' (p. Jie Wu)	753 - Svenningsen, L., Slot, R.: 'Does wind turbine rotor size impact the effect of turbulence on power production?' (p. Lasse Svenningsen)	675 - Xu, H., Ding, K., Sheng, G.: 'Experimental investigation on wind-induced vibration of photovoltaic modules supported by suspension cables' (p. Kunyang Ding)	558 - Besing, H., Lazarus, S., Subramanian, C., Pinelli, J.: 'Near surface wind measurements during the 2022 Atlantic hurricane season' (p. Hadley Besing)	713 - Duarte, T., Alhayik, I., Subgranon, A.: 'Performance-based design optimization of wind-excited structures considering the effects of climate change on the expected life-cycle loss' (p. Thays Duarte)	
	16:00 - 16:15	563 - Luo, Z., Yang, Q., Li, K.: 'Spatio-temporal wind field reconstruction method based on deep reinforcement learning algorithm' (p. Zhenzhi Luo)	661 - Catania, M., Pomaranzi, G., Zasso, A.: 'The role of Permeable Double Skin Façades in vortex shedding mode of high rise buildings' (p. Marcello Catania)	767 - Yamaguchi, A., Kyomasu, A., Ishihara, T.: 'A Correction Method of Lidar Measured Turbulence and its Validation by Using Metmast Data' (p. Atsushi Yamaguchi)	251 - Flamand, O., Giovannelli, G., Manthey, M.: 'Dependency of wind excitation of tall timber buildings to structural damping' (p. Olivier Flamand)	783 - Piccozi, V., Sepe, V., Avossa, A., Ricciardelli, F.: 'On the calibration of the logarithmic mean wind profile based on experimental data' (p. Vincenzo Sepe)	775 - Xu, L., Spence, S.: 'Reliability assessment of reinforced concrete structures within the setting of performance-based wind engineering' (p. Liyun Xu)	
	16:15 - 16:30	669 - Wu, H., Cao, Y., Chen, Y., Zhou, D.: 'A prediction method of peak wind pressure on the building facade assisted by Convolutional Neural Networks' (p. Haokai Wu)	703 - Škvorc, P., Melnjak, P., Kozmar, H.: 'Aerodynamic characteristics of buildings with porous surfaces: The effect of building aspect ratio' (p. Petar Škvorc)	780 - Kiwata, T., Hamano, T., Takeuchi, S., Shima, T., Heragy, M., Ueno, T.: 'Flow-Induced Vibration Characteristics of a V-shaped Prism and Performance of Magnetostrictive Wind Vibrational Power Generator' (p. Takahiro Kiwata)	733 - Pagnini, L., Torre, S., Ruffini, E., Piccardo, G.: 'Influence of parameters on VIV spectral approach for circular cylinders' (p. Luisa Pagnini)	786 - Nafisifard, M., Pathan, S., Bogunović Jakobsen, J., Sjöholm, M., Zasso, A., Giappino, S., Snæbjörnsson, J., Mann, J.: 'Full-scale to model-scale comparison of flow conditions downstream of a bridge girder' (p. Jasna Bogunović Jakobsen)	777 - Arunachalam, S., Spence, S., Duarte, T., Subgranon, A.: 'Experimental validation of a stochastic simulation model for non-Gaussian and non-stationary wind pressures using stationary wind tunnel data' (p. Srinivasan Arunachalam)	
	16:30 - 16:45	720 - Li, X., Liu, W.: 'Detecting the Large-scale Wall-attached Eddies by a Machine Learning Perspective in Turbulent Boundary Layer' (p. Xuebo Li)	778 - Moretti, D., Bronkhorst, A., van Dijk, T., Geurts, C.: 'Dynamic characteristics of high-rise buildings: In-situ measurements versus FEM calculations' (p. Davide Moretti)	569 - Qin, Y., Caracoglia, L.: 'Influence of pivot position on the performance of a torsional flutter harvester under stationary turbulent winds' (p. Yuhui Qin)	96 - Zaracho, J., Ginger, J., Parackal, K., Henderson, D.: 'Aeroelastic modelling of solar trackers' (p. Juan Zaracho)	815 - Bukola, A., Dragomirescu, E., Hinzler, K., Haysom, J.: 'Wind-induced response measurements of a dual axis photovoltaic solar tracker' (p. Elena Dragomirescu)	808 - Athanasiou, A., Tirca, L., Stathopoulos, T.: 'The acrosswind effect on the performance-based assessment of tall steel buildings in multi-hazard environment' (p. Anastasia Athanasiou)	
	16:45 - 17:00	100 - Li, Y., Cheng, R., Lin, B., Wu, C.: 'Prediction of wind speed and direction data from meteorological stations by using Back-Propagation Neural Network' (p. Yi-Chao Li)	773 - Eriksen, M., Vestergaard Larsen, S., Koss, H.: 'Wind Load Study on High-Rise Buildings with multi-directional Mode Shapes in Complex Terrain' (p. Mads B. Eriksen)	830 - Bruschi, N., Ferri, G., Marino, E., Papi, F., Bianchini, A.: 'Influence of tower design on the dynamics of a 15MW floating offshore wind turbine' (p. Niccolò Bruschi)	456 - Yan, K., Wu, Y., Chen, Z.: 'Wind tunnel study on aeroelastic wind responses of cable-reinforced air-supported membrane structures' (p. Keye Yan)	556 - Chavez, M., Baskaran, B., Aldoum, M., Stathopoulos, T., Geleta, T., Bitsuamlak, G.: 'Field monitoring of wind loads on "in-service" buildings: experimental methodology and data analysis' (p. Mauricio Chavez)	842 - Francioli, M., Petriani, F.: 'Wind and earthquake multi-hazard performances evaluation for steel frames' (p. Mattia Francioli)	
	17:00 - 17:15	833 - Modé, P., Demartino, C., Lagaros, N., Georgakis, C.: 'Short-term extreme wind speed forecast using Random Forest and LSTM: a classification approach' (p. Paraskevi Modé)	766 - Kemper, F., Bronkhorst, A., Geurts, C.: 'Quantification of wind-induced coupled vibrations of a high-rise structure in urban context' (p. Frank Kemper)	280 - Cataldo, J., Lopez, B.: 'Open source model for micro-siting design and analysis of wind farms' (p. Jose Cataldo)		499 - Li, X., Huang, M., Kareem, A.: 'Computer vision-based vibration identification for the roof mast of Saige Plaza Building' (p. Xianzhe Li)	683 - Yuhang, F., Huang, G., Chen, X.: 'Analysis of crosswind response of base-isolated tall buildings considering nonlinear aerodynamic damping' (p. Xinzhong Chen)	
Break	17:15 - 17:30							
Plenary Session	17:30 - 18:00	<b>Closing Session</b>						