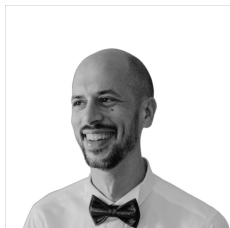



PERSONAL INFORMATION




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Nationality Italian

WORK EXPERIENCE

05 Feb 2021 - present

Associate Professor in Applied Mechanics

Professore Associato (L. 240/10) – SSD: ING/IND-13
Department of Mechanical Engineering
Politecnico di Milano, Italy

05 Feb 2018 - 04 Feb 2021

Senior Researcher in Applied Mechanics

Ricercatore a t.d. (art. 24 c.3-b L. 240/10), SSD: ING/IND-13
Department of Mechanical Engineering
Politecnico di Milano, Italy

01 June 2013 - 04 Feb 2018

Junior Researcher in Applied Mechanics

Ricercatore a t.d. - t.pieno (art. 24 c.3-a L. 240/10), SSD: ING/IND-13
Department of Mechanical Engineering
Politecnico di Milano, Italy

March 2010 - June 2013

Post-doc Research Fellow

Department of Mechanical Engineering
Politecnico di Milano, Italy
Topics: Aeroelasticity and vibrations of mechanical systems, experimental techniques and wind tunnel testing

EDUCATION

Jan 2007 – Feb 2010

Ph.D. in Mechanical Engineering

EQF 8

Department of Mechanical Engineering, Politecnico di Milano, Italy.
Thesis title: Time-domain modeling of nonlinear aerodynamic forces acting on bridge decks

Oct 2003 - Jul 2006

M.Sc. in Mechanical Engineering

EQF 7

Politecnico di Milano, Italy.
Major: Mechatronics and robotics
Thesis: Numerical modeling and dynamic optimization of a washing machine

Sep 2000 - Sep 2003

B.Sc. in Mechanical Engineering

EQF 6

Politecnico di Milano, Italy.

TEACHING EXPERIENCE

A.Y. 2022/23 - present (4 years)

Lecturer in Dynamics of Aerospace Systems

8 ECTS, in Italian (*Dinamica di Sistemi Aerospaziali*)

B.Sc. in Aerospace Engineering, Politecnico di Milano

A.Y. 2021/22 - present (5 years)

Lecturer in Machine Dynamics & Vibrations

6 ECTS, in English

M.Sc. in Civil Engineering, Politecnico di Milano

A.Y. 2014/15 - 2021/22 (8 year)

Lecturer in Applied Mechanics

10 ECTS, in Italian (*Meccanica Applicata alle Macchine*)

B.Sc. in Mechanical Engineering, Politecnico di Milano

A.Y. 2006/07 - 2020/21 (15 years)

Assistant Lecturer

for several courses at Politecnico di Milano

- Wind Engineering, Profs. Diana / Rocchi, 6 ECTS, in English. 2011/12 - 2020/21 (10 years).
- Meccanica Applicata (Applied Mechanics), Prof. Pennacchi, 5 ECTS, in Italian. 2016/17 - 2020/21 (5 years).
- Meccanica Applicata (Applied Mechanics), Prof. Bocciolone, 5 ECTS, in Italian. 2015/16.
- Sistemi Meccatronici e Laboratorio (Mechatronic Systems with Laboratory), Prof. Braghin, 10 ECTS, in Italian. 2011/12 - 2014/2015 (4 years).
- Meccanica delle Vibrazioni (Mechanical Vibrations), Profs. Pennacchi/Zuin/Broglio, 7 ECTS, in Italian. 2008/09 - 2013/14 (6 years).
- Laboratorio di Meccatronica (Mechatronics Laboratory), Prof. Braghin, 5 ECTS, in Italian. 2008/09 - 2010/11 (3 years).
- Fondamenti di meccanica teorica e applicata (Fundamentals of Mechanics), Prof. Collina, 5 ECTS, in Italian. 2007/08
- Modellistica e Misure per i sistemi Meccanici (Modeling and Measurements of Mechanical Systems), Prof. Pennacchi, 5 ECTS, in Italian. 2007/08
- Laboratorio di Automazione (Automation Laboratory), Prof. Mapelli, 5 ECTS, in Italian. 2006/07

RESEARCH ACTIVITIES

My research activities focus on the dynamics of structures and mechanical systems, with a primary emphasis on fluid-structure interaction phenomena. I employ both numerical and experimental approaches in my investigations. The major research topics are listed below.

Aeroelasticity and aerodynamics of long-span bridges

In this field, my research activity has been multifaceted, and I have been addressing different aspects of the fluid-structure interaction. In particular:

- *Non-linear features of the unsteady aerodynamic forces acting on bridge decks*: experimental study of effects of large variations of the angle of attack on the aeroelastic coefficients for a wide range of reduced velocities, measuring both global and distributed forces. Definition of non-linear dynamic numerical models to reproduce aeroelastic effects (e.g. rheological models, Volterra methods, Laguerre, etc. [J6, C13, J10, J11, J12, C41, C45, J27, J32, C67]).
- *Multi-box deck section aerodynamics*: several projects have involved the study of twin-box deck sections (e.g. the 1915 Çanakkale [J7], the Lusail bridge n.8, a Japanese cable-stayed bridge, the Gronda Nord deck section). Many efforts have been dedicated to the study of the triple-box girder of the Messina Straits bridge [J12, J19, J25, J27, J29] Lately, a research project on this topic is in progress in collaboration with NTNU - Norwegian University of Science and Technology [J17, J11, J10].
- *Aeroelastic stability and Buffeting response to non-stationary winds*: these topics are addressed both experimentally in wind tunnel on scale models, and numerically using custom dynamic fluid-structure interaction models.

Experimentally, tests are conducted either on full-bridge aeroelastic models (e.g.[J12, J19, J32]) or on sectional models (e.g.[J7, J11, C40, J23, J24, J25, C53, J28, J30])

Numerical simulations for buffeting responses are performed both in frequency and in time domain using a sectional multi-modal approach. A procedure for the simulation of multivariate and multi-correlated turbulent wind fields was developed. For aeroelastic stability, simulations are run either by means of nonlinear iterative multi-modal eigenvalue problems, or by means of linear and nonlinear dynamic models in the time domain (e.g. [J19, J25]).

These methodologies have been applied to the studies of several long-span bridges, listed in [Expertise on bridges aerodynamics](#).

Vortex shedding and Vortex-Induced Vibrations

Several research activities have involved the study of the vortex-induced vibrations of slender structures, and eventually the study of countermeasures.

- *Numerical and experimental analysis of vibrations induced by vortex shedding* on towers, slender structures, and bridge decks, with design of passive countermeasures or aerodynamic tailoring: e.g. the pylons of the new Juventus stadium, the A-frame of the Dubai Eye observation wheel [J9, C43], the Swan River bridge in Perth [C34, C35], the tower of the Forth Replacement Crossing [C60], the aesthetic obelisk of the Torino fashion village [C28], the Anji bridge in India [C26], the Polcevera bridge in Genoa, the Storstrøm bridge in Copenhagen, the Gronda Nord bridge in Genoa.
- *Aerodynamic interference effects* between parallel bridges, and aerodynamic effects of ground proximity on decks: experimental assessment of the effects on aerodynamic forces and on vortex-induced vibrations (e.g. the parallel Ewijk bridges [J23], the Metro B cable-stayed bridge in Santo Domingo [C29, C39], the Lusail bridge in Qatar, the Van Brieneenoord bridge in Rotterdam).

Aerodynamics of bluff bodies and complex structures

Several research activities have involved the assessment of wind loads on complex structures or bodies.

- *Design of wind barriers* to protect road vehicles from wind actions: study of several geometries for wind barriers with a focus on both vehicles and side effects on decks (e.g. aeroelastic stability or vortex-induced vibrations). Analysis of aerodynamic forces acting on vehicles crossing the wake of pylons and design of wind barriers [J31, C66].
- *Aerodynamics of complex buildings*: experimental measurements of global wind loads on rigid scale models, assessment of pedestrian comfort in urban canyons, measurement of wind loads on louvers (e.g. Bosco Verticale buildings [J26, C64], Amore Pacific HQ tower [C33, C36], Swan river arch bridge [C34, C35], the Suez movable bridge)
- Many *large large roof structures* are tested in wind tunnels using rigid scaled models, and their dynamic response is computed numerically. The research in this topic consists in defining and applying methodologies to define equivalent static wind loads that are representative of the most severe dynamic effects [J8, C5, C4, C16]. Some applications includes the use of proper orthogonal decomposition techniques and they were applied to the Extremely Large Telescope (ELT) in Chile, the Al Wakrah Stadium in Qatar, or the AEK stadium in Athens.
- *Aerodynamics of single-axis solar trackers* in stand alone and in array configuration [J1, C5, C4, C17, C16]
- *Aerodynamic testing of full-scale high-speed trains* in collaboration with Bombardier Transportation: during the certification procedure, one of the ETR1000 high speed test-trains has been instrumented with internal and external pressure sensors to assess the aerodynamic performances of the train in open air and in tunnels [C37, C38, J18].

Vibration control The main activities in this field involved:

- Development of innovative suspension and damping systems for rotating machinery, with application to washing machines [J22, C42, C51, C70, C71].
- Development of active damping devices for aeroelastic models, using piezoelectric patch actuators, semi-active eddy-current devices, small-scale TMDs [C55].
- Design of tuned mass dampers for structures excited by VIV. Some examples are the legs of frame the Dubai Eye observation wheel [C43], the stay-cables of the roundabout flyover Hovenring bridge in Eindhoven (NL) [J20, C54], and the high tapered obelisk of Torino fashion village [C30].

Modal analysis and dynamics of structures

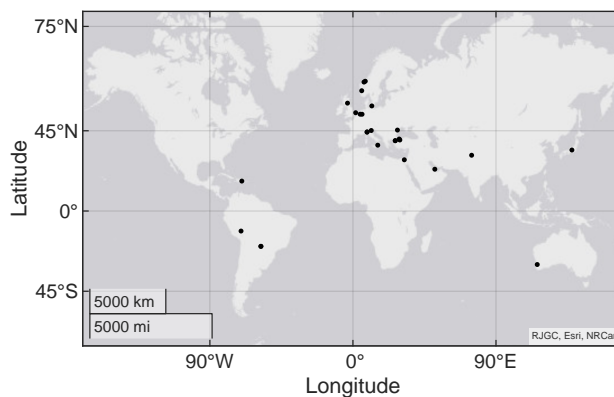
I carried out several experimental campaigns aimed at identifying the modal parameters of large structures in-field and of aeroelastic models in wind tunnels, in order to validate or update their finite element model.

The most significant examples of large structures include the modal identification of the highway cable-stayed bridge over the Adige bridge in Italy, the testing of the bridge over the Bacchiglione river, the modal identification of the walls of the combustion chamber of the energy plant in San Vittore del Lazio, the modal identification of the aesthetic arches of the Expo in Milan, and the modal identification of the stay cables of the Hovenring bridge in Eindhoven, the modal identification of the solar tracker arrays of the photovoltaic park in La Vega, Spain (e.g. see [C8, C17, C16, C47, C52, C57, C58]).

QUALIFICATIONS

Expertise on bridge aerodynamics

I have studied the aerodynamics of more than 25 long span bridges all over the world, synthetically geo-localized in the map and listed in the table below.



	Name	main-span length [m]	total length [m]
1	Messina Strait	3300	3660
2	Çanakkale 1915	2023	5169
3	Julsundet	1625	1948
4	Izmit Bay (Osmaganzi)	1550	2682
5	Third Bosphorus Bridge (Yavuz Sultan Selim)	1408	2164
6	Braila	1120	2194
7	Forth Replacement Crossing (Queensferry)	650	2700
8	S.Domingo Metro B bridge	650	800
9	IHI twin-box deck	650	2730
10	Gjemnessund	623	1257
11	Puente Binacional	350	631
12	Puente Binacional (ver- sion 2)	350	631
13	Lake Loathing	342	342
14	Storstrøm	320	3832
15	El Ferdan Bridge	320	640
16	Adige	310	1087
17	Van Brieneenoordbrug	280	1320
18	Ewijk	270	1055
19	Gronda Nord Genova	235	740
20	Puente Carlos	235	1245
21	Bjornafjord	180	5530
22	Swan River Pedestrian Bridge	160	370
23	Anji Khad	150	300
24	Lusail n. 8 & 9	129	204
25	San Giorgio (Polcevera)	100	1067

Honours and Awards

- Recipient of the *IABSE Outstanding Paper Award: Scientific Paper* for the article [J5], awarded by the International Association for Bridge and Structural Engineering (IABSE) in 2024
- Recipient of the award for the best paper in wind engineering written by a young researcher for the article [J27], awarded by the Italian association for wind engineering (ANIV) in 2014.

Memberships	<ul style="list-style-type: none">– Member of the International Association of Bridge and Structural Engineers (IABSE).– Member of the Steering Committee of IABSE-IT, the Italian Group of the IABSE association.– Member of the IABSE Task Group 3.1: Super-long Span Bridge Aerodynamics. The activity of the working group consists in the development of numerical-experimental benchmarks to define a standard for the validation of numerical/analytical models for the simulation of the aeroelastic response of long-span bridges. The following publications are available [C14, J5, J13, J14, C24, C25]– Member of the Steering Committee of Italian Association for Wind Engineering (ANIV) (2024-2027)
Editorial	<p>Reviewer for the following ISI journals: Journal of Wind Engineering and Industrial Aerodynamics; Wind Energy; Engineering Structures; Journal of Fluids Engineering; Journal of Vibration and Control; Wind and Structures, An International Journal; Structural Engineering International; Shock and Vibration; Engineering Applications of Computational Fluid Dynamics.</p> <p>Reviewer for several International Conferences.</p>
Invited lectures	<ul style="list-style-type: none">– <i>Bridge aeroelasticity: Present and Future Challenges</i>, held at RISM Workshop “Bridges between Mathematics and Engineering: Interactions fluid-structures”, in October 2023– <i>Nonlinear aeroelastic forces acting on bridge decks: numerical modelling and wind tunnel testing</i>, held at Norwegian University of Science and Technology (NTNU) in April 2018
Speaker at scientific conferences	Presenter of the papers [C68, C60, C61, C53, C55, C51, C49, C44, C34, C33, C35, C28, C31, C26, C25, C23, C11]
Collaborations	Several research activities were performed in collaboration with both international research groups and engineering companies. The most relevant results are reported in publications [C65, C66, J31, J26, J28, C43, J21, C36, C37, C34, C40, C25, J14, J13, C27, J11, J10, J7, J5, J6, C15, C14, C13]
Institutional roles at POLIMI university	Final exam manager for the M.Sc. in Mechanical Engineering at Bovisa campus since 2021.

Project management Project manager of several research and technical projects funded by private companies:

- **Contract 030/14PC:** “Studio sul ponte Atirantado nella Repubblica Dominicana”
Client: Technital S.p.a.
Task: aerodynamic characterization of a concrete bridge deck for the tramway of Santo Domingo. Tailoring of the section to improve the aeroelastic stability, to lower static wind loads, and to suppress vortex induced vibrations
- **Contract 113/14PC:** “Wind Loads on the Louvers of Amore Pacific HQ: 1:4 and 1:1 model tests”
Client: Amorepacific Co.
Task: Study of the wind induced loads on the sunshade fins of the AmorePacific HQ building in Seoul, using wind tunnel tests on 1:4 and 1:1 scale models. The study was aimed at optimizing the support structure of the fins.
- **Contract 073/15PC:** “Wind tunnel tests on Swan River Bridge”
Client: Enigma Engineering S.r.l.
Task: Study of the aerodynamic loads acting on a arch bridge in Perth (Australia) by means of wind tunnel tests and numerical analyses. Optimization of the performances by aerodynamic tailoring of the deck and changing the porosity of the cladding panels of the arches.
- **Contract 047/16PC:** “Risposta dinamica di strutture snelle all'azione del vento”
Client: Torino Fashion Village S.r.l.
Task: Characterization of VIV acting on a high tapered obelisk, and design of a passive damping system.
- **Contract 007/17PC:** “Anji Khad Cable Stayed Bridge - Wind tunnel tests”
Client: Mario Petrangeli & Associati S.r.l.
Task: Aerodynamic characterization of a truss bridge deck for a railway in India. Tailoring of the section to improve the aeroelastic stability, to lower static wind loads, and to suppress vortex induced vibrations.
- **Contract 015/17PC:** “Torre Maggiolina - Prove in Galleria del Vento”
Client: Abitare In S.p.a.
Task: Characterization of wind loads acting on a high rise building in a urban terrain
- **Contract 018/17PC:** “Prove in galleria del vento Campus Bocconi”
Client: Università Commerciale Luigi Bocconi
Task: Characterization of wind loads on buildings with large vertical walls and continuous curvature. These can give rise to significant negative values of the pressure coefficients, which, associated with the effects of the atmospheric turbulence in urban areas, may require a specific design of the supporting frame of the facade.
- **Contract 016/18PC:** “Prove in galleria del vento sull'edificio C21 in Vietnam”
Client: Maffei Engineering
Task: Characterization of wind loads on a tall building in a tropical climate.
- **Contract 129/18PC:** “Hovenring bridge: assessment of stay cables tension”
Client: Victor Buyck Steel Construction N.V.
Task: Experimental indirect assessment of the stay cables tension in a roundabout fly-over in the Netherlands.
- **Contract 029/19PC:** “Calcolo della risposta dinamica al vento turbolento dei windscreen dell'ELT per definizione di carichi statici equivalenti e verifica a fatica”
Client: Cimolai S.p.A.
Task: Numerical assessment of the dynamic response of the Extreme Large Telescope due to wind buffeting. Calculation of the equivalent static wind loads.
- **Contract 037/19PC:** “Prove in galleria del vento su Ponte Gronda Nord”
Client: SPEA Engineering S.p.A.
Task: Wind tunnel testing and tailoring of a double deck section.

- *Contract 055/19PC*: “Wind tunnel testing for the Van Brienenoordbrug”
Client: Ove Arup and Partners Ltd
Task: Wind tunnel testing of two arch bridges in twin configuration.
- *Contract 036/20PC/DMEC*: “Calcolo risposta dinamica dell’ELT in configurazione aperta: forze in fondazione e carichi statici equivalenti”
Client: CIMOLAI S.p.A
Task: Numerical assessment of the dynamic response of the Extreme Large Telescope due to wind buffeting. Calculation of the equivalent static wind loads and of the spectrum of foundation forces.
- *Contract 004/22PC/DMEC*: “Wind tunnel tests on full bridge aeroelastic models of Puente Binacional Carmelo Peralta-Puerto Murtinho”
Client: Consorcio Prointec
Task: Full bridge aeroelastic tests and deck sectional model tests.
- *Contract 044/22PC/DMEC*: “Calcolo risposta dinamica dell’ELT in configurazione aperta e chiusa: forze in fondazione con nuovi parametri per gli isolatori sismici”
Client: CIMOLAI S.p.A
Task: Additional analyses related to previous contract 036/20/PC .
- *Contract 054/22PC/DMEC*: “Hovenring - indirect measurement of stay cables tension”
Client: Victor Buyck Steel Construction N.V.
Task: Indirect assessment of the stay cables tension in a roundabout flyover in the Netherlands, after 10 years of operation.
- *Contract 052/23PC/DMEC*: “Identificazione modale di un singolo inseguitore solare”
Client: COMAL S.p.A
Task: On field modal analysis of a single-axis solar tracker in field, in order to perform accurate aerolastic stability simulations.
- *Contract 052/23PC/DMEC*: “Wind tunnel tests - PYBRA - Puente Carmelo Peralta”
Client: Consorcio Binacional PYBRA
Task: Full bridge aeroelastic tests and deck sectional model tests.
- *Contract 054/23PC/DMEC*: “Wind tunnel tests on twin-box bridge ” *Client*: IHI INFRAS-TRUCTURE SYSTEMS Co., Ltd.
Task: VIV anaysis and measurement of aeroelastic forces of a twin-box dek section for a bridge in Japan
- *Contract 061/23PC/DMEC*: “Wind tunnel tests: Çanakkale deck sectional model” *Client*: Cowi A/S
Task: Effects of geometric details on the aeroelastic performance of the twin-box deck section of the 1915 Çanakkale, the longest suspension bridge

ADDITIONAL INFORMATION

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	B1	B2	B1	B1	B1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

SCIENTIFIC PUBLICATIONS

- Journal articles**
- [J1] Giorgio Frontini, Filippo Calamelli, Sara Muggiasca, and Tommaso Argentini. "Key parameters influencing wind-induced aeroelastic responses of single-axis solar trackers in photovoltaic plants". In: *Solar Energy* 287.113232 (2025). DOI: 10.1016/j.solener.2024.113232.
 - [J2] Filippo Calamelli, Roberto Rossi, Tommaso Argentini, Daniele Rocchi, and Giorgio Diana. "A nonlinear approach for the simulation of the buffeting response of long span bridges under non-synoptic storm winds". In: *Journal of Wind Engineering and Industrial Aerodynamics* 247 (Apr. 2024), p. 105681. DOI: 10.1016/j.jweia.2024.105681.
 - [J3] Javier Sánchez-Haro, Guillermo Capellán, Paula Pérez, and Tommaso Argentini. "A simplified approach to assess dynamic amplification due to accidental release of formwork traveller during the construction stages of bridges". In: *Engineering Structures* 305 (Apr. 2024), p. 117715. DOI: 10.1016/j.engstruct.2024.117715.
 - [J4] T. Argentini, S. Muggiasca, G. Notaro, D. Rocchi, and F. Zanelli. "Equivalent Oscillator Approach To Model Vortex Induced Vibrations On A Circular Cylinder". In: *Journal of Sound and Vibration* (2023), p. 117675. DOI: 10.1016/j.jsv.2023.117675.
 - [J5] Giorgio Diana, Stoyan Stoyanoff, Andrew Allsop, Luca Amerio, Michael Styrk Andersen, Tommaso Argentini, Filippo Calamelli, Miguel Cid Montoya, Vincent de Ville de Goyet, Santiago Hernández, José Ángel Jurado, Igor Kavrakov, Guy Larose, Allan Larsen, Guido Morgenthal, Daniele Rocchi, Martin N. Svendsen, and Teng Wu. "IABSE Task Group 3.1 Benchmark Results. Numerical Full Bridge Stability and Buffeting Simulations". In: *Structural Engineering International* 33.4 (Sept. 2023), pp. 623–634. DOI: 10.1080/10168664.2022.2104188.
 - [J6] Henrik Skyvulstad, Øyvind W. Petersen, Tommaso Argentini, Alberto Zasso, and Ole Øiseth. "Regularised Volterra series models for modelling of nonlinear self-excited forces on bridge decks". In: *Nonlinear Dynamics* (May 2023). DOI: 10.1007/s11071-023-08527-2.
 - [J7] T. Argentini, D. Rocchi, C. Somaschini, U. Spinelli, F. Zanelli, and A. Larsen. "Aeroelastic stability of a twin-box deck: Comparison of different procedures to assess the effect of geometric details". In: *Journal of Wind Engineering and Industrial Aerodynamics* 220 (Jan. 2022), p. 104878. DOI: 10.1016/j.jweia.2021.104878.
 - [J8] Giorgio Frontini, Tommaso Argentini, Lorenzo Rosa, and Daniele Rocchi. "Advances in the application of the Principal Static Wind Loads: A large-span roof case". In: *Engineering Structures* 262 (2022), p. 114314. DOI: 10.1016/j.engstruct.2022.114314.

- [J9] Sara Muggiasca, Stefano Giappino, Tommaso Argentini, Andrea Collina, Alessandra Manenti, and Giorgio Diana. “Wind resistant design of a very large observation wheel”. In: *Structural Engineering International* 32.1 (May 2022), pp. 8–18. DOI: 10.1080/10168664.2021.1911612.
- [J10] H. Skyvulstad, Ø.W. Petersen, T. Argentini, A. Zasso, and O. Øiseth. “The use of a Laguerrian expansion basis as Volterra kernels for the efficient modeling of nonlinear self-excited forces on bridge decks”. In: *Journal of Wind Engineering and Industrial Aerodynamics* 219 (2021). DOI: 10.1016/j.jweia.2021.104805.
- [J11] Henrik Skyvulstad, Tommaso Argentini, Alberto Zasso, and Ole Øiseth. “Non-linear modelling of aerodynamic self-excited forces: An experimental study”. In: *Journal of Wind Engineering and Industrial Aerodynamics* 209 (2021), p. 104491. DOI: 10.1016/j.jweia.2020.104491.
- [J12] Tommaso Argentini, Daniele Rocchi, and Claudio Somaschini. “Effect of the low-frequency turbulence on the aeroelastic response of a long-span bridge in wind tunnel”. In: *Journal of Wind Engineering and Industrial Aerodynamics* 197 (Feb. 2020), p. 104072. DOI: 10.1016/j.jweia.2019.104072.
- [J13] Giorgio Diana, Stoyan Stoyanoff, Ketil Aas-Jakobsen, Andrew Allsop, Michael Andersen, Tommaso Argentini, Miguel Cid Montoya, Santiago Hernández, José Ángel Jurado, Hiroshi Katsuchi, Igor Kavrov, Ho-Kyung Kim, Guy Larose, Allan Larsen, Guido Morgenthal, Ole Øiseth, Simone Omarini, Daniele Rocchi, Martin Svendsen, and Teng Wu. “IABSE Task Group 3.1 Benchmark Results. Part 1: Numerical Analysis of a Two-Degree-of-Freedom Bridge Deck Section Based on Analytical Aerodynamics”. In: *Structural Engineering International* 30.3 (Oct. 2020), pp. 401–410. DOI: 10.1080/10168664.2019.1639480.
- [J14] Giorgio Diana, Stoyan Stoyanoff, Ketil Aas-Jakobsen, Andrew Allsop, Michael Andersen, Tommaso Argentini, Miguel Cid Montoya, Santiago Hernández, José Ángel Jurado, Hiroshi Katsuchi, Igor Kavrov, Ho-Kyung Kim, Guy Larose, Allan Larsen, Guido Morgenthal, Ole Øiseth, Simone Omarini, Daniele Rocchi, Martin Svendsen, and Teng Wu. “IABSE Task Group 3.1 Benchmark Results. Part 2: Numerical Analysis of a Three-Degree-of-Freedom Bridge Deck Section Based on Experimental Aerodynamics”. In: *Structural Engineering International* 30.3 (Oct. 2020), pp. 411–420. DOI: 10.1080/10168664.2019.1661331.
- [J15] Claudio Somaschini, Tommaso Argentini, Elia Brambilla, Daniele Rocchi, Paolo Schito, and Gisella Tomasini. “Full-Scale Experimental Investigation of the Interaction between Trains and Tunnels”. In: *Applied Sciences* 10.20 (2020). DOI: 10.3390/app10207189. URL: <https://www.mdpi.com/2076-3417/10/20/7189>.
- [J16] I. Kavrov, T. Argentini, S. Omarini, D. Rocchi, and G. Morgenthal. “Determination of complex aerodynamic admittance of bridge decks under deterministic gusts using the Vortex Particle Method”. In: *Journal of Wind Engineering and Industrial Aerodynamics* 193 (Oct. 2019), p. 103971. DOI: 10.1016/j.jweia.2019.103971.
- [J17] A. Zasso, T. Argentini, S. Omarini, D. Rocchi, and O. Øiseth. “Peculiar aerodynamic advantages and problems of twin-box girder decks for long span crossings”. In: *Bridge Structures* 15.3 (2019), pp. 111–120. DOI: 10.3233/BRS-190162.
- [J18] C. Somaschini, T. Argentini, D. Rocchi, P. Schito, and G. Tomasini. “A new methodology for the assessment of the running resistance of trains without knowing the characteristics of the track: Application to full-scale experimental data”. In: *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit* 232.6 (2018), pp. 1814–1827. DOI: 10.1177/0954409717751754.

- [J19] T. Argentini, G. Diana, D. Rocchi, and C. Somaschini. “A case-study of double multi-modal bridge flutter: Experimental result and numerical analysis”. In: *Journal of Wind Engineering and Industrial Aerodynamics* 151 (2016), pp. 25–36. DOI: 10.1016/j.jweia.2016.01.004.
- [J20] Tommaso Argentini, Lorenzo Rosa, and Alberto Zasso. “Wind-induced vibrations of the stay-cables of a roundabout flyover: assessment, repair, and countermeasures”. In: *Journal of Performance of Constructed Facilities* 30.6 (2016), p. 04016046. DOI: 10.1061/(ASCE)CF.1943-5509.0000897.
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