



The 19th International Advanced School on Wind Engineering (IAS19)

University of Florence, Florence, Italy

September 1 - 2, 2023

AIMS AND SCOPE

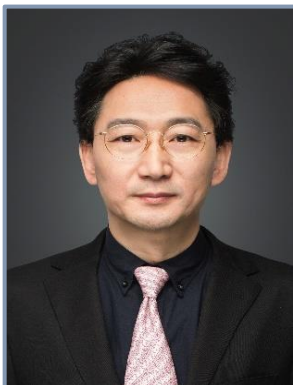
It has been reported that the majority of economic losses due to natural disasters in the world have been caused by extreme wind related events, and it is hypothesized that global warming has the potential to further exacerbate this scenario through an increase in the number of weather-related devastating disasters. Buildings and structures are densely constructed in urban areas, and are becoming taller and slenderer, and thus more vulnerable to wind. As a result, wind engineering research and education are becoming increasingly important. However, some universities have only a few curriculums in the wind engineering field. In addition, students, young researchers and engineers in the world rarely have an opportunity to take top level lectures by world eminent wind engineers and professors. The International Advanced School (IAS) on Wind Engineering was inaugurated by Prof. Yukio Tamura of Tokyo Polytechnic University in 2006 to cover this lack of relevant advanced professional training.

The lectures in the IAS19 will deal with structural wind engineering issues, and provide state-of-the-art scientific knowledge and the latest technical information in these areas. The IAS19 also provides the opportunity for direct contacts with world eminent researchers in the various areas of wind engineering for young students and engineers in Italy and other countries, and will be of great interest to students, engineers, and researchers who work in the wind engineering field and the building construction industry.

ORGANIZING CHAIR: Qingshan Yang (Chongqing University)

HOSTING CHAIRS: Claudio Borri and Gianni Bartoli (University of Florence)

FOUNDING CHAIR: Yukio Tamura (Chongqing University)



Organizing Chair
Qingshan Yang



Hosting Chair
Claudio Borri



Hosting Chair
Gianni Bartoli



Founding Chair
Yukio Tamura

SUPPORTED BY:

Chongqing University, China

- Base for Innovations of Discipline to University on High-performance Wind Energy System and Effective Operation
- Chongqing's Key Laboratory of Wind Engineering and Wind Resources Utilization, School of Civil Engineering

University of Florence, Italy

Tokyo Polytechnic University, Japan

Beijing Jiaotong University, China

- Base for Innovations of Discipline to University on Mitigating Wind-induced Disaster of Wind-sensitive Infrastructures

LECTURERS



Shuyang Cao
Tongji Univ.



Richard Flay
Auckland Univ.



Ahsan Kareem
Univ. of Notre Dame Western Univ.Kenny



Greg Kopp



C.S. Kwok
Univ. of Sydney



Horia Hangan
Ontario Tech Univ.



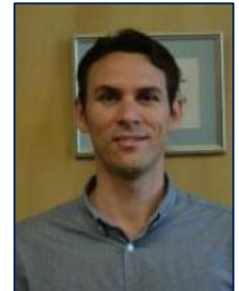
Ruediger Hoeffler
Ruhr Univ.



Claudio Mannini
Univ. of Florence



Enzo Marino
Univ. of Florence



Matthew Mason
Univ. of Queensland



Bille Spencer
Uni. of Illinois UC



Ted Stathopoulos
Concordia Univ.



Mark Sterling
Univ. of Birmingham



Yukio Tamura
Chongqing Univ.



You-Lin Xu
Southwest J. Univ.

COURSE SCHEDULE

SEPTEMBER 1, 2023

Time	Lecturer	Topic
08:35 - 08:50		Registration
08:50 - 09:00	C. Borri	Opening Address
09:00 - 09:50	R. Flay	Bluff-body aerodynamics
10:00 - 10:50	H. Hangan	Modeling of non-synoptic winds and their impacts on structures
11:00 - 11:50	A. Kareem	Dynamic response of structures to non-stationary winds – Generalized wind loading chain
13:00 - 13:50	M. Sterling	Flows over natural canopies
14:00 - 14:50	K. Kwok	Wind-induced vibrations of structures with special reference to tall buildings
15:00 - 15:50	B. Spencer	Topology optimization of buildings subjected to stochastic wind excitation
16:00 - 16:50	T. Stathopoulos	Urban wind energy
17:00 - 17:50	E. Marino	Fundamentals of wind-wave interaction modeling for offshore structures

SEPTEMBER 2, 2023

Time	Lecturer	Topic
09:00 - 09:50	G. Kopp	The partial-turbulence-simulation wind-tunnel method for determining aerodynamic loads on building components and cladding
10:00 - 10:50	R. Hoeffler	Wind damages in the construction phase and early life time of important structures
11:00 - 11:50	M. Mason	Catastrophe risk and vulnerability modelling: A wind engineer's primer
13:00 - 13:50	Y.L. Xu	Digital twin for vortex-induced vibration of long-span bridges
14:00 - 14:50	C. Mannini	Mathematical modeling of vortex-induced vibration, galloping and their interaction
15:00 - 15:50	S.Y. Cao	CFD applications to structural wind engineering problems
16:00 - 16:50	Y. Tamura	Damping in buildings for wind resistant design
16:50 - 17:00	Q.S. Yang	Closing Address
17:00 - 17:10		Distribution of Certificates

VENUE

Centro Didattico Morgagni (Morgagni Learning Center), Univ. of Florence/Univ. di Firenze viale G.B. Morgagni 44, Firenze

CONFERENCE TRANSPORTATION

Tramway line T1, direction Ospedale Careggi, stop at "Morgagni-Università"

REGISTRATION

Registration fees (VAT 22% included): 110 EUR

ONLINE REGISTRATION*

*Registration portal is not the same as ICWE16 abstract submission and registration. Two different registrations are required.

Registration will close on August 21, 2023.

From this date only onsite registrations will be accepted.

All questions about registration have to be addressed to: ias19@aimgroup.eu.

Registration fee includes:

2 Light Lunches for attendees, 4 coffee breaks, Certificates for IAS19 attendees

PAYMENTS

Payment of registration fee can be done as follows:

- Credit card

All major credit cards are accepted (VISA, Eurocard/Master Card)

- By Bank transfer to:

AIM Italy srl

AIM Italy srl – Banca CR FIRENZE Spa – Gruppo Intesa Sanpaolo

Piazza Beccaria 1R – 50121 Florence, Italy

IBAN: IT21 0030 6902 9931 0000 0010 260

SWIFT/BIC BCITITMM

Please state the name of participant and the name of the conference and send copy of bank transfer by email ias19@aimgroup.eu

CANCELLATION POLICY

The cancellation should be notified in writing only. The registration fees less than 20% administrative charges will be refunded if the cancellation is announced **before August 6, 2023**. After this date no refund will be possible. Refunds will be processed and issued 60 days after the congress.

SECRETARIAT

Dr. Ali Hui: alihui@cqu.edu.cn

Ms. Earlin Mo: 13642792735@163.com

PAST INTERNATIONAL ADVANCED SCHOOL

IAS	Dates	Location	Chair
IAS 1	July 14 - 15, 2006	Atsugi, JAPAN	Y. Tamura
IAS 2	Mar. 5 - 9, 2007	Tokyo, JAPAN	Y. Tamura
IAS 3	Nov. 21 - 23, 2007	Shanghai, CHINA	Y.J. Ge, Y. Tamura
IAS 4	Dec. 6 - 8, 2007	Seoul, KOREA	Y. Tamura
IAS 5	Mar. 23 - 25, 2009	Opole, POLAND	T. Chmielewski, Y. Tamura
IAS 6	Aug. 31 - Sep. 4, 2009	Beijing, CHINA	Y. Tamura
IAS 7	Dec. 6 - 8, 2010	New Delhi, INDIA	P. Krishna, Y. Tamura
IAS 8	Nov. 14 - 18, 2011	Hong Kong, CHINA	Y.L. Xu, K.T. Tse, Y. Tamura
IAS 9	Aug. 13 - 16, 2012	Manila, PHILIPPINES	B.M. Pacheco, Y. Tamura
IAS10	Feb. 10 - 12, 2014	Kuantan, Malaysia;	M.I. Ali, N. I. Ramli
IAS11	March 13 - 14, 2014	Taipei, TAIWAN CHINA	C.M. Cheng
IAS12	June 29 - July 1, 2015	Porto Alegre, BRAZIL	Q.S. Yang, A.L. Souza, Y. Tamura
IAS13	Oct. 10 - 12, 2016	Beijing, CHINA	Q.S. Yang, Y. Tamura
IAS14	Jan. 13, 2017	Kuantan, MALAYSIA	M.I. Ali, N. I. Ramli
IAS15	Oct. 16 - 18, 2017	Chongqing, CHINA	Q.S. Yang, Y. Tamura
IAS16	Oct. 20 - 22, 2018	Chongqing, CHINA	Q.S. Yang, Y. Tamura
IAS17	Aug. 30 - Sep. 1, 2019	Beijing, CHINA	Q.S. Yang, Y. Tamura
IAS18	Aug. 21 - 22, 2021	ONLINE	Q.S. Yang, Y. Tamura
IAS19	Sep. 1 - 2, 2023	Florence, ITALY	Q.S. Yang, C. Borri, G. Bartoli