Chair of Structural Mechanics

Institute of Structural Engineering (IBK) Department of Civil, Environmental and Geomatic Engineering (D-BAUG) Swiss Federal Institute of Technology (ETHZ) HIL E 33.3 Stefano-Franscini-Platz 5 CH-8093 Zürich, Switzerland chatzi@ibk.baug.ethz.ch Tel. +41446336755



PERSONAL INFORMATION

Date of birth:	18.11.1981 (Athens, Greece)	
Nationality:	Greek	
Website:	http://www.chatzi.ibk.ethz.ch	
ORCiD:	orcid.org/0000-0002-6870-240X	
	Professional & Teaching Experience	
2017-	ETH Zürich, Institut für Baustatik und Konstruktion / Institute of Structural	
	Engineering, Zurich, Switzerland	
	Associate Professor - Chair of Structural Mechanics & Monitoring	
	• Teaching	
	 Theory of Structures II (Baustatik II) – BSc level 	
	 Method of Finite Elements I (linear FEM) – MSc level 	
	 Method of Finite Elements II (nonlinear FEM) – MSc level 	
	• Structural Identification & Health Monitoring – MSc level	
	• Non-Destructive Evaluation & Rehabilitation of Existing Structures – MSc level	
	• Doctoral Seminar Data Science and Machine Learning in Civil, Env. and	
	Geospatial Engineering – MSc level	
	• Research in the field of Scientific Computing with special interests on:	
	 Hybrid Modelling & Digital Twinning of Structures and Intrastructures Structurel Health Monitoring, Data driven Diagnostics and Prognostics 	
	 Identification and Control of Nonlinear Structural Systems 	
	 Smart Sensor Technology Smart Materials and Structures 	
	 Data-driven decision support for Predictive Maintenance 	
2022	Scientific Advisor Imag Technologies AG (ETH Spineff)	
2023-	Scientific Advisor Irmos-Technologies AG (ETH Spinoff)	
2022-	co- founder & Scientific Advisor <u>RTD1 Laboratories AG</u> (E1H Spinoff)	
2010-2017	ETH Zürich, Institut für Baustatik und Konstruktion / Institute of Structural	
	Engineering, Zurich, Switzerland	
	Assistant Professor - Chair of Structural Mechanics	
2008-2010	Columbia University, New York, USA - Teaching Assistant	
	Spring 2009, 2010: Teaching Assistant for the undergraduate course Structural	
	Analysis, Dept. Civil Engineering & Engineering Mechanics. Columbia University.	
	Fall 2008, 2009: Teaching Assistant for the undergraduate course Dynamics and	
	Vibrations, Dept. Civil Engineering & Engineering Mechanics. Columbia University.	
	EDUCATION	
2010	Doctor of Philosophy (Ph.D.)	
	Department of Civil Engineering and Engineering Mechanics, Columbia University	
	Thesis Topic: Development and application of parametric system identification	
	algorithms for Structural Health Monitoring (awarded with distinction)	

2008	Master of Philosophy (M.Phil)
	Department of Civil Engineering and Engineering Mechanics, Columbia University,
	New York
2006	Master of Science (M.Sc.)
	Department of Civil Engineering, National Technical University of Athens (NTUA)
2004	Diploma Degree
	Department of Civil Engineering of the National Technical University of Athens
	(NTUA), Magna cum laude, Diploma GPA: 9.45/10.
1999	Highest entering score in the Dpt. of Civil Engineering of the National Technical
	University of Athens. Ranked 5th in the National Pan-Hellenic Examination

PERSONAL SKILLS & COMPETENCES

Languages ¹				
Greek	Mother tongue	French	B2	
English	C2	Spanish	A2	
German	C1			
Computer skill	ls			
Computing:	Matlab, Octave, LabView	Languages: Fortr	an, Python, Visual Basic	
Text processing	g: MS Office, LaTeX			
		DIST	INCTIONS AND AWARDS	
2023	The Model Validation and Uncertainty	Quantification Best P	Paper Award by the	
	Technical Division of MVUQ at the So	ciety for Experimenta	al Mechanics.	
2023	JM Ko Award - recognizing excellence	in Structural Enginee	ering research by	
	honoring young individuals at or under	the age of 45 who ha	ve made outstanding	
	contributions through original research	of the highest level o	f excellence.	
2022	Dandelion Award for Entrepreneurship – ETH Zurich			
2022	Thorpe Medal, awarded from the Europ	bean Council on Com	puting in Construction	
	(EC3), for the paper titled Digital technologies can enhance climate resilience of			
	critical infrastructure, co-authored by A	argyroudis, S.A., Mito	oulis, S.A., Chatzi, E.,	
	Baker, J.W., Brilakis, I., Gkoumas, K.,	Vousdoukas, M., Hyı	nes, W., Carluccio, S.,	
	Keou, O., Frangopol, D.M., Linkov, I.	(<u>DOI link</u>)		
2020	EASD Junior Research Prize in the area	a of Computational St	tructural Dynamics,	
	awarded by the European Association of	of Structural Dynamic	es (EASD)	
2020	ASCE Walter L. Huber Civil Engineeri	ng Research Prize		
2019	Best paper of the year award, ASCE Jo	urnal of Architectural	Engineering (DOI link)	
2019	Telford Premium Prize, for the paper of	n Static and dynamic	rocking stiffness of	
	shallow footings on sand: centrifuge me	odelling (<mark>DOI link</mark>)		
2019	TUM-IAS Hans Fischer Fellowship aw	arded by the TÜV Sü	d Foundation	
2018	Marquis Who's Who in the World			
2016	T. Francis Ogilvie Young Investigator	Lecture award, award	ed by the Center for	
	Ocean Engineering, Massachusetts Inst	itute of Technology (MIT).	
2015	ERC Starting Grant 2015 Award, ERC	-2015-StG #679843		

¹ Level of the Common European Framework of Reference for Languages: A: basic – B: independent: C: proficient

2010	ASCE/EMI Conference, Student Paper Competition Finalist
2010	Distinction from the Fu Foundation School of Engineering and Applied Science at
	Columbia University for the Doctoral Dissertation
2009	Student Competition award in the Asia - Pacific Summer School on Smart Structures
	Technology held at University of Illinois at Urbana-Champaign.
2008-2009	Marie Curie Fellowship, SICON Events
2009	The Mindlin Award - Department of Civil Engineering and Engineering Mechanics in
	Columbia University
2008-2010	Graduate Teaching Assistantship - Department of Civil Engineering and Engineering
	Mechanics of Columbia University.
2006-2008	Graduate Research Assistantship - Department of Civil Engineering and Engineering
	Mechanics of Columbia University.
2006	Fulbright Scholarship
2004	Distinction (Suma Cum Laude) from the National Technical University of Athens
	"Kontodimou Honor" for my GPA during the 9th Semester of my studies.
1999-2004	Annual academic scholarships awarded by the Technical Chamber of Greece (TEE),
	for excellence
1999-2004	Annual academic Scholarships & Prizes awarded by the State Fellowship Foundation
	of Greece for excellence
1999-2001	Mathematics Honors: "P.Rokos" Honor, "Chr.Papakiriakopoulos" Honor, "Ioannis
	Chatsopoulos" Honor,"Nikolaou Kritikou" Honor for excellence in Mathematics
1999	"D.Komninou Honor" highest entering score for the Civil Engineering Department of
	NTUA in the National Pan-Hellenic Entrance Exams.

Research Grants

- MSCA-2022-PF-01 Grant, OMoRail On-Board Monitoring of In-Service Trains for the Structural Health Monitoring of Railway Bridges, Postdoctoral Fellow: Charikleia Stoura
- **SNSF MINT Project**, 200021L_212718, Modelling and estimation of unsteady aerodynamic flow at high Reynolds number, collaboration with S. Barber (OST), B. Podvin (CNRS), C. Braud (CNRS), M. Magno (ETH)
- ETH Mobility Initiative Grant, In-service diagnostics of the catenary/pantograph and wheelset axle systems through intelligent algorithms (SENTINEL), in collaboration with Dr. Paolo Tiso, and Prof. Olga Fink (EPFL)
- Independent Research Fund Denmark (DFF) International Postdoc grant (Host), Grant number 1056-00016B, Fault quantification in operating wind turbines, Postdoctoral Fellow: Szymon Gres
- HORIZON-MSCA-2021-SE-01-01, ReCHARGED, Resilience to multiple natural hazards for critical infrastructure enhanced by digital technologies
- Margarita Salas Grant for training young doctors (Host), 2021 resolution GC/2021/03/23, Postdoctoral Fellow: Larisa Garcia-Ramonda Estevez
- ETH Postdoctoral Fellowship Grant, 21-2 FEL-03 (Host), On-Board Monitoring of Railway Bridges via collection of vibration data from in-service trains, Postdoctoral Fellow: Charikleia Stoura
- ETH Mobility Initiative Grant, Early Detection and Assessment of Railway Substructure Moisture Problems at National to Local Scale Using Spaceborne, Airborne and Train-based Remote Sensing Systems (REASSESS), in collaboration with Prof. Hajnsek, Dr. Frey and Prof. Wieser (ETHZ)
- Seed Money Grant CLS HSG, A Collaborative Research Network for Safe and Resilient Infrastructures through Smart and Sustainable Monitoring Solutions, in collaboration with Dr. Christian Silva Salazar (Espol, Ecuador)

- Swiss National Science Foundation (SNSF) Research Grant, Fusion of Models and Data for Enriched Evaluation of Structural Health, Project #200021L_192139, effective 01/10/2020-30/09/2023 – bilateral collaboration with Prof. Ostachowicz, Polish Academy of Sciences (IMP PAN)
- Future Resilient Systems Cluster 1 PI: Cyber-Physical Systems Resilience, LINK
- SNSF Bridge Discovery project AeroSense: a novel MEMS-based surface pressure and acoustic IoT measurement system for wind turbines, collaboration with Barber Sarah (HSR), Chatzi Eleni (ETHZ), and Magno Michele (ETHZ), <u>LINK</u>
- H2020-SC5-2018-2019-2020, SC5-17-2018 RIA Grant, RISE (#821115): Real-time Earthquake Risk Reduction for a Resilient Europe, Swiss PIs: S. Wiemer, E. Chatzi, B. Stojadinovic
- **ITN Training Network**, H2020-MSCA-ITN-2018, INSPIRE: Innovative Ground Interface Concepts for Structure Protection, Swiss PIs: Prof. E. Chatzi, Prof. B. Stojadinovic
- **SEED Project**, Post-fabrication Structural Monitoring Demonstrator of the DFAB House, funded as part of a demonstrator project for the Partnership Council of Sustainable Construction (ETHZ)
- ETH Mobility Initiative Grant, On board Monitoring for Integrated Systems Understanding & Management Improvement in Railways (OMISM), in collaboration with Prof. Corman and the Swiss Federal railways (SBB)
- ERC Proof of Concept (PoC) Grant ERC-2018-PoC WINDMIL RT-DT, An autonomous Real-Time Decision Tree framework for monitoring and diagnostics on wind turbines
- ETH Research Grant, Forschungsgesuch ETH-11 18-1, "Enabling Dynamic Earthquake Risk Assessment (DynaRisk)", start date: 01.01.2019
- H2020-MG-2016-2017 Grant, FORESEE, Future proofing strategies FOr RESilient transport networks against Extreme Events, MG-7-1-2017 RIA, Swiss PIs: Prof B. Adey, E. Chatzi
- H2020-MSCA-IF-2017 Grant (Host), SiMAero, Simulation-Driven and On-line Condition Monitoring with Applications to Aerospace, Proposal ID: 795917, Postdoctoral Fellow: Dr. Konstantinos Agathos, (Academic Host Prof. E. Chatzi)
- SNSF R'Equip Grant, Smart Monitoring System for Inspection and Life-Cycle Assessment of Critical Infrastructure, Project # 206021_177012, 01/12/2017-30/11/2018
- ITN Training Network, MSCA-ITN-2017, DyVirt: Dynamic Virtualisation: modelling performance of engineering structures, Swiss PIs: Prof. E. Chatzi, Prof. B. Stojadinovic
- ETH Research Grant, Forschungsgesuch ETH-49 17-1, "Metastructures for Seismic Vibration Attenuation", PhD Fellow: Ms. Rachele Zaccherini, effective 01/10/2017
- ERC Starting Grant, ERC-2015-StG #679843, "WINDMIL Smart Monitoring, Inspection and Life-Cycle Assessment of Wind Turbines", effective 01/06/2015-31/05/2020
- ETH Postdoctoral Fellowship Grant, FEL-45 14-2 (Host), "A data-driven computational framework for damage identification and life-cycle management of wind turbine facilities", Postdoctoral Fellow: Luis David Avendaño Valencia
- National research Programme NRP70 "Energy Turnaround", Joint Project: "Concrete Solutions", Chatzi, E., and Brühwiler, E.: "Getting more out of Structures through monitoring and simulation", Project #407040_154060, effective 01/06/2015-30/04/2018
- Swiss National Science Foundation (SNSF) Research Grant, "Long-term Resistance of Gradient Anchorage for Prestressed CFRP Strips in Structural Concrete Retrofitting", Project # 00021_1537212, effective 01/10/2014-30/09/2017
- Swiss National Science Foundation (SNSF) Research Grant, "A Multiscale Hysteretic XFEM Scheme for the Analysis of Composite Structures", Project # 200021_153379, effective 01/04/2014-31/03/2017
- Swiss National Science Foundation (SNSF) Research Grant, "Hysteretic Multi/Scale Modeling for the Reinforcing of Masonry Structures", Project # 200021_146996, effective 01/04/2013-31/03/2015.

• ETH Research Grant, Forschungsgesuch ETH-26 12-2, "ETH House of Natural Resources – Innovative Structure for Sustainable Buildings", in collaboration with Prof. Dr. A. Frangi, effective 01/04/2013.

Accompanying grant: ETH Scientific Equipment Program Grant

- "Structural Identification for Condition Assessment of Swiss Bridges", Research Grant funded by Bundesamt für Strassen - ASTRA (Federal Roads Office - FEDRO), Project # AGB 2012/015, effective 30/11/2012-31/08/2014.
- Swiss National Science Foundation (SNSF) Research Grant, "Implementation of Wireless Sensor Networks for Monitoring of Large Civil Structures", Project # 200021_143212, effective 01/10/2012-30/09/2015.

PhD CANDIDATES' SUPERVISION

- M. Graf: "Bayesian framework for probabilistic modelling of typhoon risks", in collaboration with M.H. Faber, <u>successfully defended in 2012</u>. Current *Position:* Senior Cat Researcher at Zurich Insurance Ltd
- S. Zhang: "Assessment of typhoon induced wind risk under climate change in Japan", in collaboration with M.H. Faber, <u>defended on 04.12.2013</u>. *Current Position:* Assistant professor, Department of Civil Engineering, College of Basic Education, National University of Defense Technology, China.
- 3. J.P. Escallón: "Simulation of flexible steel wire-net rock-fall barriers via finite element model updating", in collaboration with WSL & Geobrugg AG, <u>defended on 04.2015</u>.
- 4. M. Miah: "Semi-active control for Magnetorheological (MR) dampers via coupling of System Identification (SI) methods", <u>defended on 22.06.2015</u>. *Current Position:* Universitätsassistent mit Doktorat, TU Graz
- 5. R. Klis: "Implementation of Wireless Sensor Network for Monitoring of Large Civil Structures", <u>defended on 20.04.2016</u>
- 6. J. Felkner: "Structure as Architecture in Tall Buildings", in collaboration with J. Schwartz, D-ARCH, ETHZ, <u>defended on 21.07.2016</u>. *Current Position:* Assistant Professor, University of Texas at Austin
- 7. C. Leyder: "Structural global response of an innovative post-tensioned timber building", <u>defended</u> on 20.01.2018
- Y.E. Harmanci, "Long-term Resistance of Gradient Anchorage for Prestressed CFRP Strips in Structural Concrete Retrofitting", <u>defended on 19.11.2018</u>. *Current Position:* Research Scientist Empa
- 9. Y. Ou: "Vibration-Based System Identification and Damage Detection for Structural Components of Wind Turbines", <u>defended 21.10.2019</u>
- A. Egger, "A Scaled Boundary Approach to Forward and Inverse Problems with Applications in Computational Fracture Mechanics, Damage Localization and Topology Optimization", <u>defended</u> 07.10.2019. Current Position: Software Developer, CUBUS AG.
- 11. H. Martin-Sanz, "Getting more out of Structures through monitoring and simulation", <u>defended</u> <u>06.12.2019.</u> *Current Position:* Bridge Engineer/Specialist, Equi Bridges AG
- 12. M. Afrasiabi, "Thermomechanically Coupled Cutting Simulation using GPU-Accelerated Advanced Meshfree Methods", <u>defended 25.06.2020.</u> *Current Position:* Head of Data-driven & Computational Manufacturing Group at inspire AG
- K. Tatsis, "Physical-based Reduced Order Models for Wind Turbine condition Monitoring", <u>defended 01.06.2021.</u> *Current Position:* Research Scientist, Swiss data Science Center (SDSC) and co-founder <u>RTDT Laboratories AG</u> (ETH Spinoff)
- 14. Ch. Mylonas, "Machine Learning for Structural Health Assessment Under Uncertainty, with applications in Wind Energy", <u>defended 28.09.2021</u>. *Current Position:* Senior Consultant within the Risk Advisory Practice of Deloitte AG

- 15. R. Zaccherini, "Metastructures for Seismic Vibration Attenuation", <u>defended 09.11.2021</u>. *Current Position:* Energy Risk Controller in the Risk Management team of A2A
- 16. G. Aguzzi, "Investigation of metamaterials to control the propagation of ground and seismic vibrations in civil structures", <u>defended 06.10.2022</u>. *Current Position:* Data Scientist at Kistler Instrumente AG
- 17. C. Hoelzl, "On Board Monitoring for Railway Infrastructure", defended 11.05.2023.
- 18. P. Martakis, "SHM for Enabling Dynamic Earthquake Risk Assessment", <u>defended 05.11.2022</u>. *Current Position:* CEO & Founder Irmos-Technologies AG (ETH Spinoff)
- 19. S. Nicoli, "Enhancement of the XFEM for application on complex geometries", in progress
- 20. T. Simpson, "Substructuring as a ROM for Hybrid Simulation", defended 16.06.2023
- 21. S. Vettori, "Development of Virtual Sensing Techniques for Dynamic Virtualization", <u>defended</u> 04.05.2023
- 22. L. Li, "Bond Behavior and Debonding Failure in Fe-SMA Strengthened Steel Members", <u>defended 30.08.2023</u>
- 23. B. Zhao, in progress
- 24. K. Chondrogiannis, "Nonlinear Metamaterial Unit Lattices", in progress
- 25. K. Vlachas, "Nonlinear Model Order Reduction", in progress
- 26. G. Duthé, in progress
- 27. Y. Marikovski, in progress
- 28. P. Sieber, in progress
- 29. A. Jaffari, in progress
- 30. K. Bacsa, in progress
- 31. G. Arcieri, in progress
- 32. W. Liu, in progress
- 33. S. Ganzeboom, in progress
- 34. A. Jafarabadi, in progress
- 35. H. Dong, in progress
- 36. K. Yu, in progress

POSTDOCTORAL RESEARCHERS' SUPERVISION

- 1. Dr. Vasilis K. Dertimanis, Executive Scientific Collaborator, ongoing collaboration
- 2. Dr. Savvas P. Triantafyllou. *Current Position:* Associate Professor, National Technical University of Athens
- 3. Dr. Minas D. Spiridonakos, *Current Position:* Data Science Lead at Augmenta
- 4. Dr. Luis David Avendano Valencia, <u>Current Position: Assistant Professor, University of Southern</u> <u>Denmark</u>
- 5. Dr. Imad Abdallah, ongoing collaboration, Founder and CEO <u>RTDT Laboratories AG</u> (ETH Spinoff)
- 6. Dr. Kostantinos Agathos, *Current Position:* Lecturer, University of Exeter
- 7. Dr. Andrea Colombi, ongoing collaboration
- 8. Dr. Zhilu Lai, <u>Current Position: Assistant Professor, Hong Kong University of Science and</u> <u>Technology</u>
- 9. Dr. Larisa Garcia-Ramonda Estevez, <u>Current Position: Margarita Salas Postdoctoral Researcher</u> en Universitat Politècnica de Catalunya
- 10. Dr. Szymon Gres, Current Position: Postdoctoral Researcher, Aarhus University
- 11. Dr. Yves Reuland, ongoing collaboration, co-founder Irmos-Technologies AG (ETH Spinoff)
- 12. Dr. Charikleia Stoura, ongoing collaboration
- 13. Dr. Marcus Haywood-Alexander, ongoing collaboration
- 14. Dr. Georgios Kissas, ongoing collaboration, ETH AI Center Fellow

15. Dr. Xudong Jia, ongoing collaboration, Singapore ETH Center

SUPERVISED STUDENT/POSTDOCS DISTINCTIONS

- 2023- Luca Sardi, 2023 Hochschulpreis des Bayrischen Bauindustrieverbandes e.V.
- 2023- Karin Yu, ETH AI Center Doctoral Fellowship
- 2023- Dr. Georgios Kissas, ETH AI Center Postdoctoral Fellowship
- 2023- Karin Yu, HILTI Prize for Innovative Research 2023, awarded for the Master Thesis
- 2023- Bao Zhao, best poster award at the 4th International Conference on Vibration and Energy Harvesting Applications (VEH2023) held in Xiangtan, China
- 2023- Kiran Bacsa, Winner of the EMI 2023 Student paper Competition of the Dynamics Committee of the EMI (ASCE)
- 2023- Sergio Nicoli, second place award in the SWICCOMAS 2023 Student Poster competition.
- 2022- Dr. Konstantinos Tatsis, EAWE excellent young wind doctor award, awarded by the European Academy of Wind Energy, for his doctoral dissertation
- 2022- Karin Yu, The Silver Medal of ETH Zürich, awarded for outstanding Master's theses
- 2022- Karin Yu, The Heinrich-Hatt Bucher Prize, annually awarded to the 3 best master theses in D-ARCH/D-BAUG
- 2021- Dr. Adrian Egger, Silver Medal of the ETH Zurich for his Doctoral Dissertation
- 2021- Alexander Hammett, Auszeichnung (Distinction) des Culmann Fonds 2021, for his outstanding thesis in the domain of Civil Engineering
- 2021- Giorgos Tsialiamanis & Charilaos Mylonas, best paper award for its contribution to data analytics, on behalf of the Technical Division on Data Science of the Society of Experimental Mechanics (SEM), IMAC-XXXIX conference, 2021
- 2020- Panagiotis Martakis, Yves Reuland, International Project Competition for Structural Health Monitoring (IPC-SHM, 2020), Third Prize & Excellence Award.
- 2019- Konstantinos Vlachas, Auszeichnung (Distinction) des Culmann Fonds 2019, for his outstanding thesis in the domain of Civil Engineering
- 2019- Panagiotis Martakis, Winner of the 2019 Benedettini fellowship at the APESS 2019 +2th Asia-Pacific Euro Summer School on smart Structure Technology
- 2019- Adrian Egger, Winner of the EMI 2019 Student paper Competition of the Computational Mechanics Committee of the EMI (ASCE)
- 2018- Konstantinos Tatsis, Winner of the EMI 2018 Student paper Competition of the Structural Health Monitoring and Control Committee of the EMI (ASCE)
- 2017- Dr. Andrea Colombi, SNSF Ambizione Grant, "Structured materials for multiscale wave control", Project # 2-77160-17, Academic Hosts: Prof. E. Chatzi & Prof. B. Stojadinovic
- 2017- Raphael Mesaric and Chiara Steffen, Distinction by FEB working group for Structural Maintenance of the Swiss Society of Engineers and Architects (SIA)
- 2017- Spiros Daglas, Auszeichnung (Distinction) des Culmann Fonds 2017, for his outstanding thesis in the domain of Civil Engineering
- 2016- Panagiotis Martakis, Auszeichnung (Distinction) des Culmann Fonds 2016, for his outstanding thesis in the domain of Civil Engineering
- 2016- Paul-Remo Wagner, Innovationspreis Bautechnik 2016, for his innovative thesis in the domain of Civil Engineering
- 2016- Paul-Remo Wagner, Auszeichnung (Distinction) des Culmann Fonds 2016, for his outstanding thesis in the domain of Civil Engineering
- 2016- Giovanni Capellari, 2nd place award EMI Structural Health Monitoring and Control Committee Student Paper Competition, EMI 2106 conference
- 2012- Roland Schöbi, winner of the 2nd Hatt Bucher Prize 2012 for his MSc thesis on Subset Simulation in Engineering Problems

- 2012- Theodoros Patsios, Swiss Government Scholarship for the one-year funding of a foreign visiting research scholar
- 2011- Patrick Bischof, winner of the SGEB-Master-Preis for this MSc thesis on Anchorage of CFRP Sheets Retrofitting Masonry Walls
- 2011- Konstantinos Agathos, Swiss Government Scholarship for the one-year funding of a foreign visiting research scholar

PhD Thesis Committee

Dr. Francisco de Nolasco Santos (VUB, 2023) | Dr. Antonis Kamariotis (TUM, 2023) | Dr. Saurabh Desphande (Uni Luxembourg, 2023) | Dr. Ilias Zacharakis (University of Western Macedonia, 2023) | Dr. Francisco Pimenta (UPorto, 2023) | Dr. Andreas Müller (ETH Zürich, 2023) | Dr. Daniz Teymouri (HKUST, 2023) | Dr. Matthieu Diaz (Paris Saclay, 2023) | Dr. Yara Rossi (ETH Zürich, 2023) | Dr. Christina Insam (TUM, 2022) | Dr. Shreyas Srivatsa (AGH, 2022) | Dr. Stefan Wernitz (LUH, 2022) | Dr. Maximilian Henkel (Vrije Universiteit Brussels, 2021) | Dr. Bjørn T. Svendsen (NTNU, 2021) | Dr. Xinyu Jia (Uni. Thessaly, 2021) | Dr. Nikolaos Tsokanas (ETH Zurich, 2021) | Dr. Paul Wagner (ETH Zurich, 2021) | Dr. Sebastian Tølbøll Glavind (Aalborg, 2021) | Dr. Laura Schroder (DTU, 2021) | Dr. Bartlomiej Wojciech SAWICKI (EPFL, 2020) | Dr. Sofia Puerto Tchemodanova (Tufts, 2020) | Dr. Nikolaos Eleftheriou (TU DELFT, 2020) | Dr. Lawrence Bull (Sheffield, 2020) | Dr. Caterina Bigoni (EPFL, 2020) | Dr. Eugenio Serantoni (ETH Zurich, 2020) | Dr. Rafael Amaya Gomez (Uni Andes, 2020) | Dr. Hongrui Wang (2019) | Dr. Sai Ganesh Sarvotham Pai (EPFL, 2019) | Dr. Sten Ponsioen (ETH Zurich, 2019) | Dr. Haichen Shi (University of Sheffield, 2018) | Dr. Gianluigi Brogna (INSA, Lyon, 2018) |Dr. Long Wu (TU DELFT, 2018) | Dr. Giovanni Capellari (Milano Politecnico, 2018) |Dr. Anela Bajric-Hodzic (DTU, 2017) | Dr. Yves Reuland (EPFL, 2017) | Dr. Joseph Benjamin Nagel (ETH Zurich, 2017) | Dr. Mai Van Chu (ETH Zurich, 2016) | Dr. Kristof Maes (KU Leuven, 2016) | Dr. Christina Papadioti (University of Thessaly, 2015) | Dr. Konstantinos Agathos (Aristotle University of Thessaloniki, 2015) | Dr. Didier Vernay (EPFL, 2015) | Dr. Eliyar Agarrieh (Tufts University, 2015) | Dr. Annett Anders (DTU, 2014) | Dr. Irwanda Laory (EPFL, 2012)

INSTITUTIONAL RESPONSIBILITIES

2021-	Core Faculty member of the ETH AI Center
2021-2022	Chair, Institute of Structural Engineering, D-BAUG, ETH Zürich
2020-	Executive committee member, Data Science and Machine Learning Initiative @D-
	BAUG
2020-	Chair, ETH-Women Professors Forum (ETH-WPF) (member since 2011)
2020-	Department Delegate, D-BAUG, ETH Zürich
2018-	Member, Competence Center for Materials and Processes (MaP)
2018-	Evaluation Committee, ETH Mobility Initiative
2018-	Deputy Director of Studies, Civil Engineering (ETH Zurich)
2016-2021	Director, joint PhD Program between ETHZ/University of Zurich:
	CSZ - Computational Science Zurich
2015-	Member, Energy Science Center, ETH Zürich
2012-	Member, Partnership Council for Sustainable Construction, ETH Zürich
	Professional/Academic Societies
2024-	President, European Academy for Wind Energy (EAWE)
2022-	Chair, SWICCOMAS - Swiss Community for Computational Methods in Applied
	Sciences
2022-	Vice-Chair, Bridge Health Monitoring Committee of the IABMAS
2022-2024	Vice-President, European Academy for Wind Energy (EAWE)
2022-	Executive Board Member, Swiss Society for Earthquake Engineering and Structural
	Dynamics (SGEB)
2021-	Member of the Swiss National Research Council, Division IV: Programmes
2021-	Foundation Board Member, Hellenic Institute of Advanced Studies (HIAS)

2021-	Member, C(PS) ² - Committee on Probability and Statistics in the Physical Sciences Chair FMI Dynamics Committee of the ASCE
2020-	Scientific Steering Committee (SSC) member, Partnership for Advanced Computing
2020	in Europe (PRACE) Marshan Earrahan arrangini ann a Daugtatila Daugaania
2020-	Member, Forschungsvereinigung Baustatik-Baupraxis
2020-	IASCM
2018-	Member, fib (Fédération Internationale du Béton) – Action Group AG9
2017-	Member, Society for Experimental Mechanics (SEM)
2017-	Member, Society for Industrial and Applied Mathematics (SIAM)
2016-2020	SWICCOMAS representative in the ECCOMAS Young Investigators Committee
2016-	Executive Committee member, Swiss group of International Association for Bridge and Structural Engineering (IVBH)
2015-	Branch President, ASCE International Group in Switzerland
2015-	Member, Hellenic Society for Theoretical and Applied Mechanics (HSTAM)
2014-	Member, ASCE SEI Technical Committee, "Methods of Monitoring Structural Performance"
2011-	Member, International Association for Life-Cycle Civil Engineering (IALCCE)
2011-	Member, International Association for Computational Mechanics (IACM)
2011-	Member, International Society for Structural Health Monitoring of Intelligent Infrastructure (ISMII)
2010-	Member, EMI Structural Control and Health Monitoring Committee of the ASCE
2010-	Member, American Society of Civil Engineers (ASCE)
2010-	Member, International Association for Bridge and Structural Engineering (IABSE)
2004-	Member, Technical Chamber of Greece (TEE – TCG)
	EVALUATOR / SELECTED COMMISSIONS OF TRUST
2023-	Member, Panel PE8-CoG-2024 of the Consolidator Grant 2024 call
2018-	Remote Evaluator, ERC Consolidator Grants, EIC Pathfinder (European Commission)
2018-	Remote Evaluator, FET OPEN RIA (European Commission)
2017-	Expert Panel Member, Flanders Research Foundation (FWO), Belgium
2017-	Evaluation committee, Swiss National Science Foundation, SNSF – PRIMA/Eccellenza
2016-	External Reviewer, Deutsche Forschungsgemeinschaft (German Research Foundation)

PROFESSIONAL ACTIVITIES

Editorial Activities

- Co-Editor in Chief, Data Centric Engineering, Cambridge University Press
- Managing Editor, ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems
- Editorial Board member, Scientific Reports (Nature)
- Editorial Board member, Wind Energy
- Subject Editor, Journal of Sound and Vibration
- Editorial Board Member, Structure & Infrastructure Engineering, Taylor & Francis
- Associate Editor, Computational Methods in Structural Engineering, a specialty of Frontiers in Built Environment
- Associate Editor, Journal of Structural Engineering, ASCE
- Editorial Board Member, Mechanical Systems and Signal Processing, Elsevier
- Associate Editor, Journal of Engineering Mechanics, ASCE
- Editorial Board Member, Archive of Applied Mechanics, Springer
- Advisory Board Member, International Journal of Research on Engineering Structures & Materials (RESM), MIM Research Group
- Associate Editor, Structural Sensing, a specialty of Frontiers in Built Environment

- Associate Managing Editor, ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems
- Editorial Board Member, Structural Monitoring and Maintenance, International Journal, Technopress (2015-2021)
- Section Editor for the section of Structural Health Monitoring of Springer's Encyclopedia of Earthquake Engineering
- **Course Volume Editor** for the Advanced Short Course on "Identification Methods for Structural Health Monitoring and Residual Lifecycle Assessment", International Centre for Mechanical Sciences.

EU Programs Committees

2014-2019	General Secretary & Management Committee member, COST Action TU1406
	Quality Specifications for Roadway Bridges, Standardization at a European Level
2014-2019	Management Committee member, COST Action TU1402
	Quantifying the value of structural health monitoring

International Conference Committees

- International Advisory Board, Third International Nonlinear Dynamics Conference, NODYCON 2023
- Scientific Committee, 8th International Symposium on Life-Cycle Civil Engineering (IALCCE 2023), Milan, Italy, June 11-15, 2023.
- Scientific Committee, fib Symposium 2023, Building for the future: Durable, Sustainable, Resilient", which will take place at Istanbul, Turkey on 5-7 June, 2023.
- Scientific Committee, 2nd Conference of the European Association on Quality Control of Bridges and Structures EUROSTRUCT2023, Vienna, Austria, September 27 - 29t, 2023
- Minisymposia and Posters Program Committee, Platform for Advanced Scientific Computing Conference 2022, PASC22, Basel, June 27-29, 2022
- International Advisory Committee, 11th International conference on Bridge Maintenance, Safety and Management (IABMAS 2022), Barcelona, Spain in July 11-15th, 2022.
- International Advisory Committee, Second International Nonlinear Dynamics Conference, NODYCON 2021
- Scientific Committee, 3rd International Conference on Natural Hazards & Infrastructure (ICONHIC2021)
- Scientific Committee, 3rd International Conference on "Coordinating Engineering for Sustainability and Resilience – CESARE'21
- Scientific Committee, Fourth Edition of the Conference on Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2021), 21-23 June 2021, Athens, Greece
- Scientific Committee, 10th International Conference on Structural Health Monitoring of Intelligent Infrastructure (SHMII-10), FEUP Campus, 30 June 2 July 2021.
- Scientific Committee, 15th International Workshop on Advanced Smart Materials and Smart Structures Technology (ANCRiSST 2020), Purdue University, July 18-19, 2020.
- Scientific Committee, 9th International Workshop on Reliable Engineering Computing (REC2020), Taormina, Italy, 17-20 May 2020
- International Scientific Committee, 10th European Workshop on Structural Health Monitoring (EWSHM 2020)
- **Technical Advisory Panel**, International Conference on Health Monitoring of Civil & Maritime Structures, HEAMES 2020, Edinburgh UK, 25-26 May 2020.

- International Scientific Committee, 2020 Engineering Mechanics Institute conference (EMI 2020), and the13th ASCE Specialty Conference on Probabilistic Mechanics and Reliability (PMC 2020)
- Scientific Committee, 2020 IABSE Congress in Christchurch, NZ
- Scientific Committee, 2020 IABSE Symposium in Wroclaw, Poland
- Scientific Committee, 5th Conference on Smart Monitoring, Assessment and Rehabilitation of Structures (SMAR2019)
- Scientific Committee, 9th International Conference on Structural Health Monitoring of Intelligent Infrastructure, SHMII-9, St. Louis, Missouri, August 4-7 2019
- Scientific Committee, IABSE2019 Guimarães Symposium
- Scientific Committee, XI International Conference on Structural Dynamics (Eurodyn 2020), 22-24 June, 2019, Athens, Greece
- Scientific Committee, International Conference CESARE'19 (Coordinating Engineering for Sustainability and Resilience), Shanghai, 5-6 September 2019.
- Scientific Committee, ECCOMAS 5th Young Investigators Conference, Cracow Poland, 1-6 September 2019.
- Scientific Committee, 8th Computational Stochastic Mechanics Conference (CMS8), Paros, Greece on June 10-13, 2018.
- Scientific Committee, International Conference on Vibration Problems (ICOVP 2019) Crete, Greece on 1-4 September 2019.
- **REC Scientific Committee,** 2nd WINERCOST'18 International Conference on Wind Energy Harvesting, Catanzaro Lido, 21-23 March 2018.
- **REC Scientific Committee,** Reliable Engineering Computing REC, July 2018, Liverpool UK
- Scientific Committee, International conference STEEL BRIDGES, 10-11 September 2018, Prague
- Workshop selection committee, International Conference on Computational Science, ICCS 2018
- Scientific Committee, 2018 IALCCE Symposium, October 28-31, 2017, Ghent, Belgium
- Scientific Committee, 2017 IABSE Symposium, September 19 23, 2017, Vancouver, BC, Canada
- Workshop Selection Committee, International Conference on Computational Science (2017)
- Technical Program Committee (TPC) Member, 26th European Safety and Reliability Conference (ESREL 2017)
- Scientific Committee, Whioce international Conference on Smart Cities: Present and Future in Shanghai (provisional dates 6 to 8 Sep. 2017)
- Scientific Committee, 4th Conference on Smart Monitoring, Assessment and Rehabilitation of Structures (SMAR2017)
- Scientific Committee, the 2016 Probabilistic Mechanics and Reliability Conference (PMC 2016), 22-25 May, 2016, Vanderbilt, University in Nashville, TN, USA
- Scientific Committee, X International Conference on Structural Dynamics (X Eurodyn 2017), 10-13 September, 2017, Rome, Italy
- Scientific Committee, 9th International Conference on Fracture of Concrete and Concrete Structures (FraMCoS-9)
- Scientific Committee, 8th International Congress on Computational Mechanics (GRACM 2016)
- Scientific Committee, European Workshop on Structural Health Monitoring (EWSHM 2016)
- Scientific Committee, 7th International Workshop on Reliable Engineering Computing (REC), Ruhr University Bochum, Germany.
- Scientific Committee, 3rd Conference on Smart Monitoring, Assessment and Rehabilitation of Structures (SMAR2015)
- Editorial Board Member, 4th International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC2015)

- Technical Program Committee (TPC) Member, 25th European Safety and Reliability Conference (ESREL 2015)
- International Advisory Committee Member for the 2014 World Congress on Advances in Civil, Environmental, and Materials Congress (ACEM14)
- Scientific Committee, Engineering Mechanics Institute conference, EMI 2013, August 4-7, 2013, Evanston, Illinois, USA
- Editorial Board Member, for the Third International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC2013)

Short Courses & Workshops

- Seminar Course: Bayesian Filtering Online Identification Beyond LTI Systems, IMAC 2020 conference, Sunday, February 9, 2020, Houston Texas
- Block Course Organizer, "Uncertainty Quantification & Data Analysis in Applied Sciences", as part of the Computational Science Zurich PhD Programme, 2017/2018/2020/2022
- Academia Industry Modeling (AIM) Week, as part of the Computational Science Zurich PhD Programme, October 2016
- Doctoral Course Organizer, "Identification Methods for Structural Systems", 5-16 October 2015, TU Graz, Austria
- European Workshop Organizer, COST Action TU1406: Quality Specifications for Roadway Bridges, Standardization at a European Level1st Workshop Meeting, Geneva, September 21–22, 2015
- Doctoral Course Organizer, "Structural Health Monitoring and Dynamic Identification of Structures", 23-26 September 2014, University of Bergamo, Italy
- Advanced Short Course Organizer on "Identification Methods for Structural Health Monitoring and Residual Lifecycle Assessment" at the International Centre for Mechanical Sciences (CISM), June 3, 2013 - June 7, 2013, Udine, Italy

JOURNAL PUBLICATIONS

- [157] Agathos, K., Vlachas, K., Garland, A., Chatzi, E. (2024) Accelerating structural dynamics simulations with localised phenomena through matrix compression and projection-based model order reduction. Int J Numer Methods Eng. 2024;e7445. doi: 10.1002/nme.7445
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- [150] Li, L., Chatzi, E., Czaderski, C., and Ghafoori, E. (2023) Influence of activation temperature and prestress on behavior of Fe-SMA bonded joints, Construction and Building Materials, 409, 134070, ISSN 0950-0618, <u>https://doi.org/10.1016/j.conbuildmat.2023.134070</u>
- [149] Kamariotis, A., Tatsis, K., Chatzi, C., Goebel, K., Straub, D. (2024) A metric for assessing and optimizing data-driven prognostic algorithms for predictive maintenance, Reliability Engineering & System Safety, 242, 2024, 109723, ISSN 0951-8320, https://doi.org/10.1016/j.ress.2023.109723
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² Joint first authorship

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KEYNOTES & INVITED TALKS

Keynote/Distinguished Lectures

- Keynote Lecture, Learning by Monitoring: Twinning and Model Discovery for System Reliability and Safety, 5th International Conference on System Reliability and Safety Engineering (SRSE 2023) Beijing, China, October 21st, 2023 (talk offered online)
- **Keynote Lecture,** *Cyber Physical Systems; a Monitoring & Predictive Maintenance Perspective,* Lorentz workshop on Predictive Maintenance, Lorentz Center @Oort, October 31st, 2023
- Keynote Lecture, Learning by Monitoring: Twinning and Model Discovery for Engineered Systems, 14th International Workshop on Structural Health Monitoring (IWSHM), September 14th, 2023, at Stanford University, CA
- Keynote Lecture, *Physics Informed Twinning for Wind Energy Infrastructure; Learning by Modelling*, XII International Conference on Structural Dynamics, EURODYN 2023, 3 July 2023, Delft, Netherlands
- Semi Plenary Lecture, Robust Monitoring for Engineered Systems: Toward Augmented Twins, 9th edition of the International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2023, 13 June 2023, Athens, Greece
- *Keynote Lecture*, *A hybrid approach, harnessing data and models, for robust condition assessment and twinning*, 4th International Conference on Health Monitoring of Civil & Maritime Structures, HeaMES 2023, 12 June 2023, online
- Plenary Lecture, Nurturing Augmented Twins; From First Principles, to Learning, to Real-time Virtualization, Engineering Mechanics Institute Conference 2023, Atlanta, Georgia, 6 June 2023
- Keynote Lecture, SHM revisited: The Role of Models from Fault Detection and Characterization to Decision Support, 6th International Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, 6 September 2022, online
- *Keynote Lecture*, *The importance of engineering models for informed monitoring of structures*, XIX Convegno ANIDIS, Torino, 14 September 2022
- Plenary Lecture, A hybrid modeling approach to learning, monitoring and virtualizing dynamical systems, 10th European Workshop on Structural Health Monitoring (10th EWSHM), July 4-7, 2022
- Keynote Lecture, The physics-based path to learning, monitoring and virtualizing dynamical systems, 8th World Conference on Structural Control & Monitoring (WCSCM), June 5-8, 2022, Orlando, Florida
- *Keynote Lecture*, *On the Synergy of data and models for Virtualizing Structures & Infrastructure*, CIS Digital twin Days, November 15-16, 2021, EPFL, Lausanne, Switzerland
- *Keynote Lecture*, *Mobile Sensing or On-board Monitoring for Railway Infrastructure*, Joint mFUND Workshop, 10.11.2021, online
- *Keynote Lecture*, On the fusion of data and models; the hybrid path to Diagnosis & Prognosis of Monitored Systems, IDETC-CIE 2021, International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, Virtual Conference: August 17 – 19, 2021
- *Keynote Lecture*, The hybrid modeling path to virtualization of monitored systems, 8th International conference on Vibration Engineering (ICVE-2021), July 23-26th 2021, held online
- *Keynote Lecture*, On the Synergy of data and models for taming uncertainty in Diagnosis & Prognosis for Infrastructure, GNI Symposium on AI for the Built World, April 20-22th 2021
- Invited Speaker, On the coalescence of structural mechanics models with data for condition monitoring, SwissMech Seminar Series, April 8th 2021

- Semi-plenary Keynote lecture, Data-informed virtualization of non-stationary and nonlinear systems, 10th International Conference on Structural Health Monitoring of Intelligent Infrastructure, SHMII-10, 30 June 2 July 2021, online
- *Plenary Speaker*, 2020 Eurodyn Conference, 23-26 November 2020
- *Keynote Speaker*, 2nd Sheffield Workshop in Structural Dynamics, Sheffield, 18-19 November 2019
- *Keynote Speaker*, 2019 Conference of the UK Society of Earthquake and Civil Engineering Dynamics (SECED2019)
- *Keynote Speaker*, 12th HSTAM 2019 International Congress on Mechanics, 22-25 September 2019, Thessaloniki, Greece
- *Semi-plenary Lecture*, COMPDYN 2019 7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering
- *Public Lecture*, Loughborough University, IAS annual interdisciplinary theme on Motion, January 2019
- *Invited Speaker*, ERC GR 2018, the first Greek ERC Grantees Conference,15-17 October 2018 at FORTH
- *Keynote Speaker*, 2018 Workshop on Nonlinear System Identification Benchmarks, University of Liège, Belgium, 11-13 April 2018.
- *Invited Speaker*, "Structural Health Monitoring Daten im Dienst der Infrastruktur", 22th Dresden seminar on structural analysis, October 19 2018.
- Mini-Keynote Speaker, "Data in the Service of Infrastructure", IMAC Conference XXXVI Society for Experimental Mechanics, February 12-15, 2018 in Orlando, Florida
- Invited Speaker, "A Monitoring Approach to Smart Infrastructure Management", 5th International Symposium on Sensor Science, 27-29 September 2017, Barcelona, Spain
- *Invited Speaker*, 6th WG WINERCOST Meeting in Thessaloniki, 4-5 September 2017
- Invited Speaker, "Re-powering Wind Infrastructure through Monitoring & Simulation", ERC Frontiers Workshop on Frontier Research and Climate Change, 31 March 2017
- Invited Speaker, "Smart-Sensoring Technologies with Application to Tunneling", Workshop on Monitoring and Sensoring in Underground Engineering, February 24th 2017, Bochum, Germany
- *Distinguished Lecture*, T.F. Ogilvie lecture in the Department of Mechanical Engineering at MIT, November 2016
- Invited Speaker, "Smart monitoring, inspection and life-cycle assessment of wind turbines", IQPC Conference "Wind Turbine Towers", 31 Aug - 01 Sept 2016, Swissôtel Bremen, Germany
- *Keynote Presentation*, "Structural Identification and Modeling based on Uncertain/Limited Information, Experimental Vibration Analysis of Civil Engineering Structures", EVACES 2015, Empa Dübendorf, Switzerland, October, 19-21, 2015
- *Review lecture*, for the Fourth International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CIVIL-SOFT-COMP 2015), Prague, Czech Republic, September, 1-4 2015
- Keynote Presentation, "Dealing with Uncertainty in the Monitoring and Simulation of Dynamically Evolving Systems2, 7th International Conference on Structural Health Monitoring of Intelligent Infrastructure (SHMII-7 2015) in Torino – Turin – Italy, July 1-3, 2015
- Mini-Keynote Speaker, for the MS on "Next-Generation Civil Infrastructure: Intelligence, Automation, and Data Analytics", of the ASCE Engineering Mechanics Institute (EMI) 2015 Conference (Stanford, CA, June 16 – 19, 2015).
- *Invited Lecture*, "Use of a Stochastically Enhanced Framework for the Modeling of Uncertain Dynamical Systems", 18. Symposium "Bauwerksdynamik und Erschütterungsmessungen", 29 May 2015, Empa Dübendorf.
- *Keynote Presentation:* E. N. Chatzi, "Detection of structural flaws using the extended finite element method and a novel genetic algorithm", XFEM 2011, June 29 July 1, 2011, Cardiff, UK

Invited Seminars

- *Invited Talk*, Robust Dynamical Systems Monitoring: Learning by Modeling, Webinar on Risk, resilience and sustainability informed integrity management of infrastructure systems, 05.12.2022, online
- *Invited Talk*, Robust Dynamical Systems Monitoring: Learning by Modeling, Data-Centric engineering Webinar series, hosted by the Alan Turing Institute and Lloyd's Register Foundation
- Invited Talk, On the fusion of data and models; the hybrid path to Diagnosis & Prognosis for Infrastructure, Structures Seminar at the University of Cambridge, June 4th 2021
- *Invited Talk*, A hybrid approach to condition monitoring via merger of data and models with focus on wind energy infrastructure, University of Colorado Boulder, December 4th, 2020
- *Invited Talk*, Symposium on New Developments in Structural Health Monitoring of Wind Turbines, organized by DTU, online, November 23, 2020
- Invited Seminar, Chatzi, E, Tatsis K: Shifting the assessment paradigm: from inanimate to selfaware infrastructures, Invited Seminar, Unconventional Seminar Series, Dynamics, Vibration and Uncertainty Group, TU DELFT, online, 02.07.2020
- *Invited Talk*, SANDIA National Labs, Albuquerque, February 2020
- Invited Talk, 2nd International Conference on Health Monitoring of Civil & Maritime Structures
- HeaMES 2019, 23rd 24th May 2019 | Glasgow, UK
- Invited Seminar, Institute of Advanced Studies, Annual Interdisciplinary Theme on Motion, University of Loughborough, January 14th 2019
- Invited Speech, SAFE-FLY short-course on Multiscale damage modelling in aerospace composite structures, 19-20 September 2018, the University of Nottingham
- Invited Speech, Sheffield Workshop on Structural Health Monitoring 27-28 March 2017
- *Invited Seminar*, Department of Civil and Environmental Engineering, Tufts University, November 2016.
- Invited Seminar, Non-destructive Testing Department, Center of Building Materials, Technical University of Munich, January 2016.
- *Invited Seminar*, EWZ Energieproduktion, November 2015.
- Invited Seminar, Structures and Composites Laboratory, Stanford University, November 2015.
- Invited Seminar, Department of Civil, Environmental & Geomatic Engineering, University College of London, February 2014.
- Invited Seminar, Department of Civil Engineering, City University of London, February 2014.
- Invited Seminar, Department of Civil and Environmental Engineering, University of California, Berkeley, February 2014.
- Invited Seminar, Department of Mechanical and Civil Engineering, California Institute of Technology, Caltech, Pasadena, California, February 2013.
- Invited Seminar at the IMAC Applied Computing and Mechanics Laboratory, Civil Engineering Institute, EPFL, Lausanne, Switzerland, November 2012
- Invited Seminar at the Department of Civil Engineering & Engineering Mechanics, Columbia University, NY, USA, October 2012
- Invited Seminar at the Swiss Seismological Service (SED), Zurich, Switzerland, April 2011.
- *Invited Seminar* at the Swiss Federal Laboratories of Material Science and Technology (EMPA), Dübendorf, Switzerland, April 2011.

International Schools/Workshop Presentations

 Training School, "Real-time Estimation via Bayesian Filtering", DyVirt ITN Network, 2nd Summer School, October 15-16 2020, online

- Training School, "Introduction to the Theory of Vibrations", INSPIRE ITN Training Network, March 3rd-5th 2020, ETH Zurich
- Short Course, Monitoring-driven approach to Assessment and Control of Structures & Infrastructures, Institute of Advanced Studies, Annual Interdisciplinary Theme on Motion, University of Loughborough, January 15th 2019
- CSE Case Studies Talk, "On the use of metamodels for simulation and diagnostics of dynamical systems", Seminar for Applied Mathematics, ETH Zurich, April 6th 2017
- *Invited Lecture*, "On the handling of uncertainty in the simulation and monitoring of vibrating systems", Asian Pacific Euro Summer School (APESS), June 25, 2016, Cambridge, UK.
- Invited Lecture, "On the use of Particle Based Methods for the Real Time Identification and Control
 of Nonlinear Dynamical Systems", for the DeGrieLab Summer School 2015, May 11-16, 2015,
 Aristotle University of Thessaloniki.
- Invited Lecture, "Reducing structural uncertainty via vibration-based monitoring", for the D-BAUG Workshop "Monitoring and Modelling for Real-Time Control and Intervention"
- *Invited Lecturer*, DAAD Workshop on "Dynamic Analysis, Testing and Design of Infrastructure to Environmental Loads", November 11-13, 2014, Aristotle University of Thessaloniki.
- *Invited Seminar*, "Efficient forward and inverse engineering via structural identification and multiscale computation", 23 September 2014, University of Bergamo.
- Invited Lecturer, DeGrie Lab Summer School on "Hybrid and Virtual Experimentation for Infrastructure Lifecycle Maintenance and Natural Hazards Resilience", 17-22 August 2014, Bauhaus University, Weimar.
- Invited Speaker, Workshop on "Validation of Computational Mechanics Models" in Munich, June 12, 2014.
- Lecturer for Advanced Short Course at CISM: "Identification Methods for Structural Health Monitoring and Residual Lifecycle Assessment", Centre International des Science Mécaniques, Udine, June 3-7, 2013.
- Invited Talk, "Monitoring and detecting damage in structures: Composite Textile for the retrofitting of masonry buildings.", CECAM Workshop on "Aging in Engineering Materials: a computational approach to durability and sustainability", 8-10 February, 2012, ETH Zürich