

# ADVANCED COMPUTING AND BIG DATA



**POLITECNICO  
MILANO 1863**

DIPARTIMENTO DI  
INGEGNERIA CIVILE E AMBIENTALE



**20th October 2021**



**9.00 – 14.00 CET**



Aula Rogers  
(Polimi - Via Ampère, 2)  
and OnLine on Webex

## GUEST SPEAKER

Michael Ortiz  
Frank and Ora Lee  
Marble Professor of  
Aeronautics and  
Mechanical Engineering  
at the California Institute  
of Technology



## Green Pass

To attend the event in  
presence, it is mandatory  
to have a Green Pass



## Online on Webex

Meeting link:  
<https://politecnicomilano.webex.com/meet/paola.gattinoni>

TIME	SPEAKER	TITLE
9:00-9:05	Alberto Guadagnini	Welcome
9:05-9:45	Invited speaker: Michael Ortiz	Model-Free Data-Driven Computing: The Data, all the Data and nothing but the Data
9.45-10.00	Discussion	
10.00-10.15	Valentina Zega	Nonlinear dynamics in MEMS: a Model Order Reduction Technique based on the Implicit Static Condensation
10.15-10.30	Attilio Frangi	Model Order Reduction Strategies for Nonlinear Micro-Electro-Mechanical Systems
10.30-10.45	Stefano Mariani	Multi-scale deep learning model for uncertainty quantification at the microscale
10.45-10.55	Paola Gattinoni	Young researchers Best posters Award
10.55-11.20	Coffee break and posters session	
11.20-11.35	Matteo Bruggi	Structural optimization for metal 3D printing
11.35-11.50	Gianandrea Messa	Challenges in the Numerical Modelling of Slurry Erosion
11.50-12.05	Massimiliano Cremonesi	Lagrangian finite element approach for the simulation of large-scale engineering problems
12.05-12.20	Maria Cristina Rulli	Big data for unravelling the environmental and human health impacts of unsustainable food production
12.20-12.35	Manuela Antonelli	Artificial intelligence and big data: perspectives for water and wastewater treatment and management
12:35-12.50	Final discussion	

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