



IFAIME-2022

1st International Forum for Artificial Intelligence in Mechanical Engineering

2022/07/25 - 09/05 HIT Shenzhen, China (Virtual)

Organizers: Bernd R. Noack, Bing Li & Xiaozhou He

ZOOM: <https://us06web.zoom.us/j/3112825550>

Schedule July 25 - 30

2022-07-25 09:00 (UTC+8)

Prof. George Em Karniadakis

Applied Mathematics and Engineering
Brown University
Also at MIT & PNNL, USA



"Discovering hidden fluid mechanics via physics-informed neural networks"

2022-07-26 09:00 (UTC+8)

Prof. Steven Brunton

Department of Mechanical Engineering
University of Washington, USA



"Machine learning for scientific discovery, with examples in fluid mechanics"

2022-07-26 15:00 (UTC+8)

Prof. Angelo Iollo

Institut de Mathématiques de Bordeaux
Université de Bordeaux & Memphis
Team, Inria, France



"Some examples of linear or nonlinear, intrusive or non-intrusive reduced models based on convex displacement interpolation"

2022-07-27 09:00 (UTC+8)

Prof. Omer San

Mechanical and Aerospace Engineering
Oklahoma State University, USA



"The prospects of hybrid analysis and modeling in fluid dynamics"

2022-07-28 09:00 (UTC+8)

Prof. Clancy Rowley

Mechanical and Aerospace Engineering
Princeton University, USA



"Data-driven modeling of nonlinear systems via the Koopman operator"

Schedule Aug 29 - Sep 05

2022-08-29 09:00 (UTC+8)

Prof. Themis Sapsis

Mechanical and Ocean Engineering
Massachusetts Institute of Technology
USA



"Likelihood-weighted active learning with application to Bayesian optimization, uncertainty quantification, and decision making in high dimensions"

2022-08-29 15:00 (UTC+8)

Prof. Luc Pastur

Mechanical Engineering Department
ENSTA Paris, Institut Polytechnique
Paris, France



"The fluidic pinball: a simple yet challenging benchmark for model reduction and flow control"

2022-08-30 15:00 (UTC+8)

Dr. Jean Rabault

The University of Oslo and
the Norwegian Meteorological Institute
Norway



"Reinforcement Learning for active flow control: state-of-the art and future perspectives"

2022-08-30 09:00 (UTC+8)

Prof. Petros Koumoutsakos

School of Engineering and Applied
Science, Harvard University, USA
Also at ETHZ, Switzerland



TBA

2022-09-05 15:00 (UTC+8)

Prof. Christian Oliver Paschereit

Institute of Fluid Dynamics and
Technical Acoustics
Technische Universität Berlin, Germany



TBA