

# ADVANCES IN FRACTURE MECHANICS and FAILURE ANALYSIS

AIAS PhD School

For PhD students and young researchers

June 12-15, 2023

AIAS (The Italian Scientific Society of Mechanical Design)

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>
	June 12, 2023	June 13, 2023	June 14, 2023	June 15, 2023
Opening	9:00-12:30	9:00-12:30	9:00-12:30	9:00-12:30
<i>Morning</i>		<b>Prof. Aleksandar Sedmak</b> University of Belgrade	<b>Prof. Filippo Berto</b> Università La Sapienza Roma and <b>Prof. Chao Gao</b> NTNU, Trondheim Norway	<b>Prof. Emiliano Mucchi</b> Vibration-based diagnostics and prognostics: theory and applications Università di Ferrara
		XFEM and Crack growth	Advanced bioinspired and data-driven design methods against fracture and fatigue	<b>Dr. Ing. Matteo Cova</b> Sacmi (Imola) Fracture mechanics in machine design and qualification: an industrial perspective
	14.00-18:30	14.00-17:30	14.00-17:30	14:30-16:00
<i>Afternoon</i>	<b>Registration and Opening of course.</b> <b>L. Vergani, P. Livieri</b> Politecnico di Milano Università di Ferrara	<b>Prof. Chiara Bertolin</b>  NTNU, Trondheim Norway	<b>Prof. Aurelio Somà</b> and <b>Dr. Ing. Davide Clerici</b> Politecnico di Torino	<b>Prof. Laura Vergani</b> Politecnico di Milano  <b>Final test</b>
	<b>Prof. Nicola Bonora</b> <b>Università di Cassino</b>	Climate-induced risk and damage in heritage objects based on damage functions and machine-learning- aided criteria	Design, modelling and fracture mechanics of lithium ion battery	
	Introduction to Fracture Mechanics and modelling in metals and alloys. Beyond fracture mechanics: modelling damage and effect			

FOR DETAILED INFORMATIONS SEE: [https://www.aiasnet.it/AIAS\\_PHD2023/index.html](https://www.aiasnet.it/AIAS_PHD2023/index.html)