

MASSIMILIANO CREMONESI, Politecnico di Milano, Italy

Talk title	Lagrangian approaches for free-surface fluid flows and fluid-structure interaction problems
Biography	<p>Massimiliano Cremonesi is an Associate Professor of Solid and Structural Mechanics at Department of Civil and Environmental Engineering (DICA) of the Politecnico di Milano, Italy. He achieved a Master Degree in Mathematical Engineering in 2006 and a PhD in Structural, Seismic and Geotechnical Engineering in 2010 at Politecnico di Milano (Italy). After a PostDoc at LMT École Normale Supérieure de Cachan (France), he came back to Politecnico di Milano, where he obtained a position of Assistant Professor (2014-2019). He holds courses on Solid and Structural Mechanics at both the bachelor and master levels and courses on Computational Mechanics for PhD students. He has been the supervisor of more than 30 Master theses and of 4 PhD theses. He has been PI for both industrial and public projects. In 2010, his PhD thesis has been selected for the 1st ECCOMAS PhD Olympiad. He has been a member of the ECCOMAS Young Investigators Committee (2016-2019). In 2019, he has received the “AIMETA Junior” Prize for Mechanics of Solids and Structures, awarded by the Italian Association of Theoretical and Applied Mechanics to young Italian scientists.</p> <p>He works in the field of Computational Solid and Fluid Mechanics. His research topics range from the simulation of thin shells to model order reduction, from the study of dissipations in micro-systems to the numerical simulation of granular materials and liquefied sands. He has made several important contributions to the simulation of fluid-structure interaction (FSI) problems in the particularly challenging case of free-surface flows and highly deformable structures.</p>