

**MS08: Particle-Based Methods In Applied And Industrial Sciences**

Organizers: Marco Fois, Paolo Joseph Baioni, Nicolò Crescenzo and Laura Moreno Martinez

***Friday, September 1st***

<b>Time</b>	<b>Speaker</b>	<b>Name of the talk</b>
10:45-11:10	Alessandro Coclite	A dynamic-Immersed Boundary approach for Fluid/Structure Interaction in Biology
11:10-11:35	Ettore Barbieri	Pyroresistivity of Conductive Polymer Composites: Algorithms for Aggregation, Percolation, and Thermoelasticity
11:35-12:00	Giuseppe Bilotta	From geophysics to industrial applications: high-performance Smoothed Particle Hydrodynamics with GPUSPH
12:00-12:25	Paolo Joseph Baioni	Material Point Method for Compressible CFD on GPUs
12:25-12:50	Nicolò Crescenzo	Simulation of hydrological hazards and their interaction with protection systems using the Material Point Method
12:50-13:15	Marco Fois	Run-out simulations of fast flow-like landslides with a semi-conservative Depth Averaged Material Point Method