

**Two-day symposium**

## **Keynote lectures**

- Marcelo H. Garcia (University of Illinois at Urbana Champaign, USA)
- Gary Parker (University of Illinois at Urbana Champaign, USA)
- Timothy J. Pedley (University of Cambridge, UK)
- Andrea Prosperetti (John Hopkins University, USA)
- Andrea Rinaldo (University of Padua, Italy, and EPFL, Switzerland)

## **Organising Committee**

- Paolo Blondeaux (University of Genoa)
- Marco Colombini (University of Genoa)
- Rodolfo Repetto (University of Genoa)
- Giovanna Vittori (University of Genoa)

# **From fluid dynamics to morphodynamics**

**In honour of Prof. Giovanni Seminara**  
on the occasion of his retirement

June, 25th and 26th  
University of Genoa  
DSA, Stradone S. Agostino 37, 16123, Genoa  
Benvenuto Hall



# Programme

## Thursday, June 25th

10:00	Opening speeches
10:30	<b>General lecture</b> <b>Andrea Prosperetti</b> (Johns Hopkins University, USA) Fully resolved simulation of disperse multiphase flows
11:20	Marco Colombini (University of Genoa) Centrifugal instability within a torsionally oscillating sphere
11:40	Giovanna Vittori (University of Genoa) Coherent vortex structures on smooth and rough walls in oscillatory flows
12:00	Dino Zardi (University of Trent) Thermally driven atmospheric flows over complex terrain
12:20	Lunch
14:30	<b>General lecture</b> <b>Tim J. Pedley</b> (University of Cambridge, UK) Micro-organism swimming: individual and collective behaviour
15:20	Rodolfo Repetto (University of Genoa) Aqueous Humour flow in the presence of intraocular lenses
15:40	Alessandro Stocchino (University of Genoa) Applications of ultrasound particle image velocimetry to physiological flows
16:00	Annunziato Siviglia (ETH, Switzerland) Transcritical conditions and bistable solutions in collapsible tubes with discontinuous mechanical properties
16:20	Coffee break
16:50	<b>General lecture</b> <b>Andrea Rinaldo</b> (University of Padua and EPFL, Switzerland) Morphodynamics of tidal environments
17:40	Stefano Lanzoni (University of Padua) Morphodynamic equilibrium of tidal channels
18:00	Luca Solari (University of Florence) On the lateral retreat of salt marshes
18:20	Conclusion
19:00	Refreshments

## Friday, June 26th

08:30	Paolo Blondeaux (University of Genoa) Pattern formation in a thin layer of sediment
08:50	Nicoletta Tambroni (University of Genoa) Morphodynamics of meandering tidal channels
09:10	Alessandro Cantelli (Shell Global - Exploration and Production) Deep-water depositional systems: from data to models to applications
09:30	<b>General lecture</b> <b>Marcelo H. Garcia</b> (University of Illinois at Urbana-Champaign, USA) Sediment transport
10:20	Coffee break
10:50	Marco Tubino (University of Trent) River bifurcations and morphodynamic influence in braided rivers: steady state and unsteady responses
11:10	Guido Zolezzi (University of Trent) Alternate bars and morphodynamic influence: from theoretical findings to observations in real rivers
11:30	Michele Guala (University of Minnesota, USA) Bedform migration and interaction with in-stream river turbines
11:50	Michele Bolla Pittaluga (University of Genoa and Shell) Morphodynamic equilibrium of alluvial estuaries
12:10	Lunch
14:30	<b>General lecture</b> <b>Gary Parker</b> (University of Illinois at Urbana-Champaign, USA) River morphodynamics
15:20	Memories