

**ERCOFTAC Autumn Festival 2021 hosted by Pilot Centre Italy****Day 1: Thursday, 7th October 2021**

Sapienza Università di Roma,
Faculty of Civil and Industrial Engineering, Via Eudossiana 18, 00184 Rome, Italy

Room "Aula del Consiglio"

PC Italy presentations and 16th Da Vinci Final

09:00 - 09:20 *Welcome and Coffee*

09:20 – 09:40 **Alessio Castorrini** (Università di Roma La Sapienza/Università di Potenza):
Computer aided engineering methods for wind prediction, assessment of wind turbine erosion and associated energy losses

09:40 - 10:00 **Francesco Battista** (Università di Roma La Sapienza):
Turbulent multiphase flows: fluid/dispersed-phase interaction

10:00 - 10:20 **PietroPaolo Ciottoli** (Università di Roma La Sapienza):
Aerospace propulsion systems CFD prediction via high-fidelity simulations and uncertainty quantification

10:20 – 10:40 **Andrea Cimarelli** (Università di Modena e Reggio Emilia):
Multi-scale properties of turbulence in flows with interfaces

10:40 – 11:10 *Coffee Break*

11:10 - 11:30 **Marco Mazzuoli** (Università di Genova):
Do sediment particles affect turbulence dynamics in oscillatory boundary layers?

11:30 - 11:50 **Gabriele Bellani** (Università di Bologna):
Canonical flows and beyond. CICLOPE and the role of experiments in the era supercomputers

11:50 - 12:10 **Alessandro Mariotti** (Università di Pisa):
Micro-mixers: flow regimes, mixing and reaction efficiency

12:10 – 12:30 **Francesco Viola** (Università Roma Tor Vergata/Laboratori Gran Sasso):
Modelling the whole human heart: results and perspectives

12:30 - 13:30 *Lunch*

13:30 – 13:50 **Marta Cianferra** (Università di Trieste):
Recent progresses in computational hydroacoustics

13:50 – 14:10 **Francesco Bonelli** (Politecnico di Bari):
Advanced thermochemical non-equilibrium modeling of hypersonic flows

14:10 – 14:30 **Barbara Re** (Politecnico di Milano):
Numerical methods for compressible multiphase flows in thermal and mechanical non-equilibrium

14:30 – 14:50 **Giulio Gori** (Politecnico di Milano):
Multi-fidelity surrogate models in aerospace applications

14:50 – 15:20 *Coffee Break*

**ERCOFTAC 16th Da Vinci Competition Award**

- 15:20 – 15:40 Miguel Beneitez Galan (KTH Royal Institute of Technology, Sweden):**
Nonlinear dynamics in transitional wall-bounded flows
- 15:40 – 16:00 C. Ricardo Constante-Amores (Imperial College, United Kingdom):**
Three-dimensional computational fluid dynamics simulations of complex multiphase flows with surfactants
- 16:00 – 16:20 Miguel P. Encinar (Universidad Politecnica de Madrid, Spain):**
Detection of intense events in wall-bounded turbulence
- 16:20 - 16:40 Miguel Angel Quetzeri-Santiago (Queen Mary University of London, United Kingdom):**
Droplet impact and contact angle dynamics on solid surfaces and textiles
- 16:40 – 17:00 Simone Silvestri (TU Delft, The Netherlands):**
High temperature turbulence - coupling of radiative and convective heat transfer in turbulent flows
- 17:00 – 17:30 Coffee Break / Committee meets and selects a winner**
- 17:30 – 18:00 Da Vinci Award Ceremony and Closing**
- 19:30 Dinner**

Day 2: Friday, 8th October 2021

Sapienza Università di Roma,
Faculty of Civil and Industrial Engineering, Via Eudossiana 18, 00184 Rome, Italy

Room "Cloister Aula"

**Scientific Programme Committee (SPC) and Knowledge Network Committee (KNC)
Managing Board (MB) and General Assembly (GA) Meetings**

- 09:00 - 09:10 Welcome and Coffee**
- 09:10 - 12:30 SPC and KNC Meetings**
- 10:30 – 11:00 Coffee Break**
- 11:00 - 12:30 SPC and KNC Meetings continue**
- 12:30 - 13:30 Lunch**
- 13:30 - 16:30 MB and GA Meetings**
- 15:00 – 15:30 Coffee Break**
- 15:30 - 16:30 MB and GA Meetings continue**

