

# II BILATERAL WORKSHOP

## SMART-TURB SMART-HEART

**Organizers:** Luca Biferale, Chiara Calascibetta  
and Liù Maria Catena



The idea of the Workshop is to have 4 days of discussions about the themes of interests of the two projects. Round tables and brainstorming sections about hidden symmetry in turbulence, data assimilation for geophysical and bio-medical complex flows, Lagrangian control of single and multi-agents systems, with applications to odor searches emitted from point and distributed sources. Problems connected to micro and nano-fluidics applications, relativistic fluid dynamics, networks dynamics and statistics will also be discussed. Participation is upon invitation only.

## PROGRAMME:

### SUNDAY 12

9H00-12H30	CHECK-IN – GET TOGETHER
12H30-14H00	LUNCH
AFTERNOON SESSION	1. SCALAR TURBULENCE (C Calascibetta - M Cencini)
20H00	DINNER

### MONDAY 13

08H00-09H00	BREAKFAST
MORNING SESSION	2. MACHINE LEARNING FOR FLUID DYNAMICS (T Li - M Buzzicotti - F Bonaccorso)
12H30-14H00	LUNCH
AFTERNOON SESSION	3. BIOMEDICAL APPLICATIONS (M Scarpolini - F Guglietta - F Viola)
20H00	DINNER

### TUESDAY 14

08H00-09H00	BREAKFAST
MORNING SESSION	4. MULTI AGENT SYSTEMS (L Piro - M Carbone - M Cencini)
12H30-14H00	LUNCH
AFTERNOON SESSION	5. GEOPHYSICAL / RELATIVISTIC FLOWS (A Lanotte - B Giambenedetti / D Simeoni - M Sbragaglia)
20H00	DINNER

### INVITED PARTICIPANTS:

Roberto Benzi (CREF and UTOV Rome, Ita)  
Luca Biferale (UTOV Rome, Ita)  
Fabio Bonaccorso (UTOV Rome, Ita)  
Michele Buzzicotti (UTOV Rome, Ita)  
Chiara Calascibetta (UTOV Rome, Ita)  
Maurizio Carbone (CNR-ISC Rome, Ita)

Massimo Cencini (CNR-ISC Rome, Ita)  
Giulio Cimini (CREF and UTOV Rome, Ita)  
Beatrice Giambenedetti (INGV and UTOV Rome, Ita)  
Fabio Guglietta (UTOV Rome, Ita)  
Alessandra S. Lanotte (CNR Nanotec Lecce, Ita)  
Tianyi Li (UTOV Rome, Ita)  
Francesca Pelusi (CNR-IAC Rome, Ita)

Lorenzo Piro (UTOV Rome, Ita)  
Mauro Sbragaglia (UTOV Rome, Ita)  
Martino Scarpolini (UTOV Rome, Ita)  
Daniele Simeoni (UTOV Rome, Ita)  
Diego Taglienti (UTOV Rome, Ita)  
Francesco Viola (GSSI L'Aquila, Italy)

### WEDNESDAY 15

08H00-09H00	BREAKFAST
MORNING SESSION	6. DROPLETS, FOAMS AND EMULSIONS (D Taglienti - F Pelusi - R Benzi - M Sbragaglia)
12H30-14H00	LUNCH
AFTERNOON SESSION	7. NETWORKS (G Cimini)

16h00-18h00	VISITA GUIDATA FONDAZIONE BURRI
20H00	DINNER

### THRUSDAY 16

08H00-09H00	BREAKFAST
09H00-10H30	CHECK-OUT



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