

24CATS Program Overview

04.15 MON →→→ 04.19 FRI

DAY 0
MON
15 April

15:00	17:00	Registration
17:00	17:30	Welcome and opening remarks
18:00	20:00	Welcome dinner

DAY 1
TUE
16 April

OIST main campus – Seminar room B250

7:00	9:00	Breakfast
9:00	10:00	Speaker 1 Rosti "Polymeric turbulence"
10:00	10:15	Coffee break
10:15	11:00	Short Talks 1-3 Cannon, Ibarra, Kha-I To
11:00	12:00	Speaker 2 Shen "Viscoelastic instabilities and elastic turbulence in porous media and canopy flows"
12:00	13:00	Lunch
13:00	14:30	Campus tour
14:45	15:00	Coffee break
15:00	16:00	Speaker 3 Gioia "Turbulent friction and the spectral link in 3- and 2-D rough-walled flows"
16:00	17:00	Speaker 4 Sun "Global and local statistics in turbulent emulsions"
18:00	20:00	Dinner

Short Talks

Cannon: Morphology and topology of droplets in turbulence

Ibarra: Transport and deformation of flexible discs in homogeneous isotropic turbulence

Kha-I To: Mechanisms of colloidal particle dispersion at air-water interfaces

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DAY 2

WED

17 April

7:00	9:00	Breakfast
9:00	10:00	Speaker 5 Govindarajan "Aspects of clustering in particulate flows"
10:00	10:15	Coffee break
10:15	11:00	Short Talks 4-6 Goto, Ishihara, Wang
11:00	12:00	Speaker 6 Meiburg "Exploring cohesive multiphase flow processes via particle-resolving simulations"
12:00	13:00	Lunch
14:00	15:00	Speaker 7 Longmire "Particle motions in transitional and turbulent wall-bounded flows"
15:00	16:00	Speaker 8 Toschi "How do dense emulsions flow?"
16:00	16:15	Coffee break
16:15	17:00	Short Talks 7-9 Brizzolara, Takagi, Boffetta
18:00	20:00	Dinner

Short Talks

Goto: Interaction between turbulence and finite-size solid particles

Ishihara: Domain dependence of relative diffusion of fluid and inertial particles in high Reynolds number turbulence

Wang: Turbulence modulations by dispersed phase: from rigid particles to droplets

Brizzolara: Immiscible Rayleigh-Taylor turbulence: implications for the biodegradation of oil spills

Takagi: Direct numerical simulation of rising bubble clustering

Boffetta: Convective mixing in porous media

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DAY 3

THU

18 April

7:00	9:00	Breakfast
9:00	10:00	Speaker 9 Sutherland "Three-phase reversing thermals"
10:00	10:15	Coffee break
10:15	11:00	Short Talks 10-12 Angheluta, Matsumoto, Nagata
11:00	12:00	Speaker 10 Pumir "Non locality and scaling of extreme events in fluid turbulence"
12:00	13:00	Lunch
14:00	15:00	Speaker 11 Biferale "Data-driven tools for Lagrangian Turbulence"
15:00	16:00	Speaker 12 Ching "Turbulent natural convection between two differentially heated vertical plates"
16:00	16:15	Coffee break
16:15	16:45	Short Talks 13-14 Shnapp, Zhang
18:00	20:00	Dinner

Short Talks

Angheluta: Exploring vortical flows induced by topological defects in active fluids

Matsumoto: Turbulence in two-dimensional lid-driven cavity

Nagata: Counter-rotating Taylor-Couette flow in the narrow-gap limit

Shnapp: The pair dispersion angle

Zhang: High Reynolds number polymeric turbulence: the elastic range scaling and coherent structures

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DAY 4

FRI

19 April

7:00	9:00	Breakfast
9:00	10:00	Speaker 13 Yakeno "Aerodynamic challenges for more effective transportation: turbulence drag reduction laminarization and flow separation controlling"
10:00	10:30	Short Talks 15-16 Olivieri, Andrean
10:30	12:00	Poster Session 1-15 with Coffee break
12:00	13:00	Lunch
13:00	13:30	Closing remarks

Short Talks

Olivieri: Direct numerical simulation of free-stream turbulence for fluid-structure interaction at moderately low Reynolds number

Andrean: Towards a new conceptual understanding of the decay of landfalling typhoons

Poster Session

Abdelgawad

Amor

Araki

Barros

Ravindran

Chola

Foggi Rota

Kim

Li

Lakhal

Maruoka

Motoori

Okuyama

Running

Mukundan Sajila

Vaquero-Steiner