

Vortex & turbulence – Tribute to Laurent Jacquin – Program (1)

Wednesday 10 september

8h30 **Welcome – Pôle de mécanique (Building 104) – See map, page 3**

9h00-9h30 **Introduction**

Address by **Christophe Josserand** École polytechnique, **Denis Sipp** ONERA, **Stéphane Andrieux** Académie des technologies, co-organisers of the conference
Address by **Kees Van der Beck** Director of Research at École polytechnique, **Riad Haidar** General Scientific Director of ONERA
Address by **Bérengère Dubrulle**, Académie des sciences, **Stéphane Andrieux** Académie des technologies, **Xavier Bouis** Académie de l'air et de l'espace

Chair Vincent Brion – Pôle de mécanique

9h30-10h15 **Jeffrey Crouch** The Boeing Company **Modeling trailing vortices to determine airplane separation requirements: Sensitivities to near-field characteristics**

10h15-10h30 **Marie Couliou** DAAA, ONERA **The effect of freestream turbulence on wing tip dynamics**

10h30-11h00 **Coffee break**

11h00-11h30 **Carlos Pantano** AME, University of Southern California **Inner-outer interactions in turbulent channel flow over rough surfaces**

11h30-12h00 **Nicolas Bonne** DMPE, ONERA **Jet Vortex interaction and vortex dynamic applied to contrail formation and evolution (how Laurent's work help to understand the climatic impact of aviation)**

12h00-12h30 **Thomas Leweke** IRPHE, CNRS **Two-phase wing tip vortex breakdown**

12h30-14h00 **Lunch – Pôle de mécanique**

Chair Christophe Josserand – Pôle de mécanique

14h00-14h45 **Bérengère Dubrulle** SPEC, CNRS **Exploring the small scales of turbulence**

14h45-15h00 TBA

15h00-15h30 **François Gallaire** EPFL **A weakly nonlinear amplitude equation approach to the bypass transition in the two-dimensional Lamb–Oseen vortex**

15h30-16h00 **Vincent Brion** DAAA, ONERA **Unsteadiness and instabilities of wing tip vortices, influence and potential of near wake effects**

16h00-16h30 **Antoine Llor** CEA **Some comments on turbulence modelling: shared views with Laurent Jacquin on large scale properties of structures, intermittency, and dissipation**

10h30-11h00 **Coffee break**

Chair Stéphane Andrieux – Pôle de mécanique

17h00-18h00 **Testimonies (Manuel Dorion-Soulié , Sébastien Michelin, Denis Sipp)**

18h30-21h00 **Cocktail – Salon d'honneur de l'École polytechnique – See map, page 3**
Speeches and cocktail

Vortex & turbulence – Tribute to Laurent Jacquin – Program (2)

Thursday 11 september

Chair Denis Sipp – Pôle de mécanique

9h00-9h45	Jean-Marc Chomaz LadHyX, CNRS & École polytechnique Performing fluids, in the art of turbulences
9h45-10h00	TBA
10h00-10h30	Sébastien Deck DAAA, ONERA Transonic buffet over the OAT15A supercritical airfoil: from experimental investigation to advanced turbulence modelling
10h30-11h00	Coffee break
11h00-11h30	Ivan Delbende Institut Jean le Rond d'Alembert, Sorbonne University Transition in helical vortex systems
11h30-12h00	Jean-Pierre Rosenblum Dassault Aviation Le montage MARCO au service de la modélisation d'arrière-corps
12h00-12h30	Olivier Marquet DAAA, ONERA Assimilation de données pour la turbulence
12h30-14h00	Lunch – Pôle de mécanique

Chair TBA – Pôle de mécanique

14h00-14h45	Benjamin Leclaire DAAA, ONERA Turbulent structures in round jets: from physical analysis to advanced metrology and flow reconstruction
14h45-15h00	Younes Bouhafid DAAA, ONERA Simulation of a contrail formation and early life cycle for a realistic airliner geometry
15h00-15h30	Pierre-Henri Maire CESTA, CEA Transition et turbulence pour la rentrée atmosphérique
15h30-16h00	David Fabre IMFT Is the transition to unsteadiness in the wake of profiled bodies an artefact of boundary conditions ?
16h00-16h30	Coffee break
16h30-17h00	Thomas Gerz DLR Wake Vortices in Aviation and Wind-Energy Supply - two examples of coherent structures in incoherent environments
17h00-17h30	Riwal Plougonven LMD, IPSL & École polytechnique Rare observations of turbulence in the lower stratosphere
17h30-18h00	TBA

Friday 12 september

Chair Bérengère Dubrulle – Pôle de mécanique

9h00-9h45	Basile Gallet SPEC, Université Paris-Saclay-CNRS-CEA Transport by 2D turbulence: Vortex-gas theory vs. self-similar inverse cascade
9h45-10h00	Yves Pomeau LadHyX, École polytechnique Singularities and intermittency
10h00-10h30	Jean-Paul Bonnet Pprime Institute, CNRS-Université de Poitiers-ISAE/ENSMA Flow control and turbulent scales interactions
10h30-11h00	Coffee break
11h00-11h30	Claude Cambon LMFA, CNRS & École centrale de Lyon Rotating turbulence and beyond (with Laurent since the early eighties)
11h30-12h00	TBA

En venant de Paris par l'A6-A10, prendre la direction Nantes-Bordeaux, puis direction Cité Scientifique (voie de gauche – N444) ensuite Saclay. Poursuivre sur la D36 puis tourner à gauche au panneau École polytechnique.

Dépasser le poste de garde puis au rond-point prendre en face la 2^e sortie et rejoindre le parking Visiteurs. [48.713971](#), [2.214638](#). Puis suivre le plan.

