



GDR « Contrôle Des Décollements » Seminar

28-29 November 2016

Program

Monday 28 November 2016
Amphithéâtre Ibis, Bâtiment W1
LMFA, École Centrale de Lyon
36, Avenue Guy de Collongue, 69130 Écully

09h00–9h30 : **Welcome coffee**

09h30–09h40 : **Introduction : Azeddine KOURTA (PRISME/GDR2502)**

09h45–10h30: **Avraham SEIFERT**, N. Shay, L. Marom and D. Dolgopyat (**Invited speaker**)

School of Mechanical Engineering, Tel Aviv University, Tel Aviv, ISRAEL
Fundamentals and Applications of Steady Suction and Oscillatory Blowing for Boundary Layer Flow Control

10h30–11h00 : **Camila CHOVET** (LAMIH), L. KEIRSBULCK, E. KAISER & B. NOACK

Active flow control on a back facing step configuration

11h00–11h30 **Gilles TISSOT**, Jean-Pierre RAYMOND (IMT Toulouse)

Accurate estimation for the closed-loop robust control using global modes: application to the Ginzburg-Landau equation

11h30–12h00 : **Charles PIVOT**, Lionel MATHELIN, Laurent CORDIER, Bernd NOACK (PPRIME, LIMSIS)

A continuous reinforcement learning strategy for closed-loop control in fluid dynamics

12h00–12h30 : **Caroline BRAUD**, Emmanuel GUILMINEAU (LHEEA)

Jet flow control at the blade scale to manipulate lift

12h30-14h00 **Lunch**

14h00–14h30 : **David LO JACONO** (IMFT Toulouse)

Passive heaving of elliptical cylinders with active pitching - from cylinders towards flapping foils

14h30–15h00 : **Stéphanie EDWIDGE** (CNAM, Plastic Omnium)

Numerical analysis of the pressure fluctuations in the shear layers at the rear of an Ahmed body with a slant angle of 47°

15h00–15h30 : **Francesco STELLA**, Nicolas MAZELLIER, Azeddine KOURTA (PRISME, Orléans)

Scale by scale analysis of turbulent separated flow

15h30-15h50 **Coffee break**

15h50–16h20 : **Ruiying LI**, Diogo BARROS, Jacques BOREE, Bernd R. NOACK, Laurent CORDIER, Fabien HARAMBAT, Olivier CADOT (PPRIME, LIMSIS, Technische Universität Braunschweig, IMSIA-ENSTA, PSA)

Feedback control of bimodal wake dynamics

16h20-16h50 : **Vladimir PAREZANOVIC**, Yannick BURY, Laurent JOLY (DAEP-ISAE/SUPAERO)

Synchronization control of a Von Karman vortex street using a DBD actuator

16h50-18h30 : **Visit of local installations**

19h30–22h30 : **Banquet of GDR 2502 « CDD »**

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- 09h00–09h30 **Welcome**
- 09h30–10h00 : **Introduction : Azeddine KOURTA** (PRISME/GDR2502)
Progress of **GDR Project**
Pierric JOSEPH, Stéphane LOYER, Nicolas MAZELLIER, Azeddine KOURTA (PRISME)
Control of GDR ramp separation with synthetic jet
- 10h00-10h45 **Marianna BRAZA** (IMFT Toulouse) (**Invited speaker**), J.F. Rouchon, J. Scheller, G. Jodin
Electroactive morphing for increasing the aerodynamic performances for the wings of the future
- 10h45-11h00 **Coffee break**
- 11h00–11h30 : **Shiqi WANG**, Lucien BALDAS, Stéphane COLIN, Nicolas MAZELLIER, Azeddine KOURTA (ICA Toulouse, PRISME Orléans)
Control of ramp separation with fluidic oscillator
- 11h30–12h00 : **Mathieu SZMIGIEL**, Thomas CASTELAIN, Marc MICHARD
Underbody velocity variation effect on the development of the bluff body wake in presence of ground
- 12h00-12h30 : **Cécile GHOUILA**, J.C. GERBEDOEN, R. VIARD, Q. GALLAS, E. GARNIER, A. TALBI, P. PERNOD (IEMN, THRUMELEC, ONERA)
Development and characterisation of multi-measurement micro-sensor dedicated to flow control
- 12h30–14h00 : **Lunch**
- 14h00–14h30 : **Eliott VARON**, Philippe GILOTTE, Yoann EULALIE, Stephie EDWIGE, Jean-Luc AIDER (PMMH, Plastic Omnium)
Characterization and control of the dynamics of a bi-modal wake
- 14h30–15h00 : **Guillaume BONNAVION**, Olivier CADOT (IMSIA-ENSTA)
Global dynamic of vehicle (monospace) wake.
- 15h00–16h30 : Round table : future **GDR tasks**