

7TH ERCOFTAC SIG33 - FLUBIO WORKSHOP ON OPEN ISSUES IN TRANSITION AND FLOW CONTROL

October 16

09:00 10:55 **Registration with welcome coffee and croissants**

10:55 11:00 **Opening statements**

Session 1 (Chairman: Dan Henningson)

Invited talk	11:00	11:45	J.M. Chomaz LadHyX	Linear and nonlinear stability of real flows: the global approach
	11:45	12:05	M. Nagata Kyoto University	The Sliding Couette Flow Problem
	12:05	12:25	D. Rodríguez & V. Theofilis School of Aeronautics, UP Madrid	Direct-Adjoint Solutions Of Boundary-Layer Flows
	12:25	12:45	A. Monokrousos, E. Akervik, L. Brandt & D.S. Henningson Linné Flow Centre, KTH	Optimal Initial Perturbations And Optimal Forcing Using Adjoint Based Methods For The Flat Plate Boundary Layer
	12:45	13:05	S. Cherubini, JC Robinet & P. De Palma Politecnico di Bari & Arts et Métiers, ParisTech	Recovering Flapping Frequency In A Separated Flow
Lunch	13:05	14:30		

Session 2 (Chairman: Ulrich Rist)

	14:30	14:50	P. Schlatter, L. Brandt, R. de Lange & D.S. Henningson Linné Flow Centre, KTH Mechanics	On Streak Breakdown In Bypass Transition
	14:50	15:10	D. Tempelmann, A. Hanifi & D.S. Henningson Linné Flow Centre, KTH Mechanics	Optimal Disturbances And Receptivity Of Three-Dimensional Boundary Layers
	15:10	15:30	L.U. Schrader, L. Brandt & D.S. Henningson Linné Flow Centre, KTH Mechanics	Leading-Edge Effects On The Receptivity Of Two- And Three-Dimensional Boundary-Layer Flow
	15:30	15:50	F. Giannetti, S. Camarri & P. Luchini DIMEC, Università di Salerno	An Adjoint-based Analysis Of The Secondary Instability Of The Wake Of A Circular Cylinder
Coffee	15:50	16:10		

Session 3 (Chairman: Paolo Luchini)

16:10	16:30	J. Hoepffner & L. Brandt Paris VI & KTH Mechanics	Stochastic Approach To The Receptivity Problem
16:30	16:50	M.M. Katasonov , V. N. Gorev & V. V. Kozlov ITAM, Novosibirsk	Wave Forerunners Of Localized Structures On Straight And Swept Wings At A High Free Stream Turbulence Level
16:50	17:10	F. Alizard , U. Rist & J.C. Robinet IAG Stuttgart Universität, SINUMEF ENSAM Paris	Linear Stability Of A Streamwise Corner Flow
17:10	17:30	V. Kozlov ITAM, Novosibirsk	Actual Problems Of The Subsonic Aerodynamics in Shear Flow Control
17:30	17:50	R. S. Donelli , F. De Gregorio Fabrizio & P. Iannelli CIRA, Capua	Flow Separation Control by A Trapped Vortex Cavity
17:50	18:10	S. Hein & E. Schülein DLR, Gottingen	Transition Control By Suction At Mach 2

October 17**Session 4** (Chairman: Jean-Marc Chomaz)

Invited talk	09:00	09:45	B. Eckhardt University of Marburg	Dynamical systems and shear turbulence
	09:45	10:05	H. Wedin , D. Biau, A. Bottaro & M. Nagata DICAT; Università di Genova & Kyoto University	Nonlinear Flow States In A Square Duct
	10:05	10:25	V.V. Kozlov , G.R. Grek, G.V. Kozlov, A.M. Sorokin & Yu.A. Litvinenko ITAM, Novosibirsk	Coherent Structures Of The Laminar And Turbulent Jets
	10:25	10:45	Y. Duguet & P. Schlatter Linné Flow Centre, KTH	Edge States And Puff-like Turbulent Regimes
	10:45	11:05	G. Pujals , C. Cossu & S. Depardon LadHyX	Optimal perturbations in zero pressure gradient turbulent boundary layers
Coffee	11:05	11:25		

Session 5 (Chairman: Viktor Kozlov)

	11:25	11:45	P. Orlandi Meccanica e Aeronautica, Università "La Sapienza", Roma	The DNS Of The Reynolds Experiment "On The Circumstances which Determine Whether The Motion Shall Be Direct Or Sinuous"
	11:45	12:05	B. Selent Institut für Aero- & Gasdynamik, Uni Stuttgart	DNS Of Jet In Crossflow On A Flat Plate Boundary Layer

	12:05	12:25	S. Bagheri , P. Schlatter , P. Schmid & D. Henningson Linné Flow Centre, KTH Mechanics	Global Stability of a Jet in Crossflow
	12:25	12:45	A. P. Willis & C. Cossu LadHyX	Optimal Growth In The Turbulent Pipe
Lunch	12:45	14:00		
	14:00	15:30	Discussion on trends in stability and transition, organisers: B. Eckhardt and J.M. Chomaz	
Coffee	15:30	15:50		

Session 6 (Chairman: Bruno Eckhardt)

Invited talk	15:50	16:35	C. Rowley Princeton University	Reduced order models for flow control
	16:35	16:55	E. Åkervik , S. Bagheri, L. Brandt & D.S. Henningson Linné Flow Centre, KTH Mechanics	Low-dimensional Model For Control Of The Blasius Boundary-layer By Balanced Truncation
	16:55	17:15	J. Weller , E. Lombardi & A. Iollo Institut de Mathématiques de Bordeaux	Robust Reduced Order Models Of A Wake Controlled By Synthetic Jets
	17:15		Ferryboat to Portofino	
	18,45		Cocktail in Portofino	
Banquet	19:30		Ferryboat to San Fruttuoso di Camogli	
	20:00		Wokshop dinner "da Giovanni"	
	22:30		Ferryboat back to Santa Margherita Ligure	

October 18

Session 7 (Chairman: Clarence Rowley)

Invited talk	09:00	09:45	P. Luchini Università di Salerno	Optimal feedback control applied to transition and turbulence
	09:45	10:05	U. Rist , H. Günes & S. Cadirci IAG Stuttgart and Istanbul Technical University	Qualitative And Quantitative Characterization Of A Jet And Vortex Actuator
	10:05	10:25	G.R. Grek , G.V. Kozlov, A.M. Sorokin & Yu. A. Litvinenko ITAM, Novosibirsk	Control Of A Round Jet By Modification Of The Initial Conditions At Nozzle Exit
	10:25	10:45	T. Bewley , J. Cessna & C. Colburn UC San Diego	EnVE: A Consistent Hybrid Ensemble/variational Estimation Strategy For Multiscale Uncertain Systems
Coffee	10:45	11:05		

Session 8 (Chairman: Paolo Orlandi)

11:05 11:25 **J. Pralits**, T. Bewley & P. Luchini
DIMEC, Università di Salerno and UCSD

Feedback Stabilization Of The Wake Behind A Steady And A Rotating Cylinder

11:25 11:45 **K. Baysal** & U. Rist
IAG Universität Stuttgart

Identification And Quantification Of The Interaction Between Shear Layers And Vortices

11:45 13:15 **Discussion on trends in control and ROM, organisers: P. Luchini and C. Rowley**

13:15 13:30 Closing

Lunch 13:30