

9th ERCOFTAC SIG33 Workshop
Progress in Transition Modeling and Control

Toledo, Spain, Sept. 28-30, 2011

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| Wednesday | Session 1 | Chair: Ulrich Rist | |
| | 15:00-15:45 | Alessandro BOTTARO | Localized, Nonlinear Optimal <i>Alessandro Bottaro</i> |
| | 15:45-16:05 | Frederic ALIZARD | Lift-up Effect In An Incompressible Corner Flow <i>F. Guiho, F. Alizard, J.-Ch. Robinet</i> |
| | 16:05-16:25 | Oliver SCHMIDT | On The Influence Of Wave Obliqueness And Compressibility On The Linear Stability Of Streamwise Corner Flow <i>Oliver T. Schmidt and Ulrich Rist</i> |
| | Coffee break | | |
| | Session 2 | Chair: Luca Brandt | |
| | 17:00-17:20 | Xuerui MAO | Optimal Control Of Transient Energy Growth <i>Xuerui Mao, Hugh Blackburn, Spencer Sherwin</i> |
| | 17:20-17:40 | Viktor KOZLOV | Subsonic Round And Plane Macro- And Micro Jets In A Transverse Acoustic Field <i>Viktor V. Kozlov</i> |
| | 17:40-18:00 | Julien HOESSLER | Stability Analysis Of Coupled Vortical Systems In The Context Of Road Car Vehicle <i>J. Hoessler, S. Sherwin</i> |
| | 18:00-18:20 | Björn SELENT | Numerical Investigation Of Jet-in-Crossflow Configurations <i>B. Selent, U. Rist</i> |

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| Thursday | Session 3 | Chair: Peter Schmid | |
| | 09:00-09:45 | Bernd NOACK | Towards A Mathematical Theory Of Turbulence Control <i>B. Noack, R. Niven, M. Morzynski, G. Tadmor</i> |
| | 09:45-10:05 | Aysel GUNGOR | The Precursor Of Kelvin-Helmholtz Instabilities In Wake-perturbed Separated Boundary Layers <i>A.G. Gungor, M.P. Simens, J. Jimenez</i> |
| | 10:05-10:25 | Stefania CHERUBINI | The Structure Of The Laminar-turbulent Edge In A Boundary Layer <i>S. Cherubini, P. De Palma, J.-Ch. Robinet, A. Bottaro</i> |
| | 10:25-10:45 | Ricardo GARCIA-MAYORAL | Kelvin-Helmholtz-like Instabilities In Turbulent Flows Over Complex Surfaces <i>R. Garcia-Mayoral, J. Jimenez</i> |
| | Coffee break | | |
| | Session 4 | Chair: Bernd Noack | |
| | 11:15-11:35 | Angel Velazquez | POD Based Reduced Order Models For Steady Multi-Parameter Problems <i>D. Alonso, B. Bache, J.M. Vega, A. Velazquez</i> |
| | 11:35-11:55 | Jose-Manuel VEGA | An Adaptive Reduced Order Model Based On Local POD Plus Galerkin Projection For Nonsteady Problems <i>M.L. Rapun, F. Terragni, J.M. Vega</i> |
| | 11:55-12:15 | Fulvio MARTINELLI | System Identification And Feedback Control Of The Flow Around A Circular Cylinder <i>F. Martinelli, P. J. Schmid</i> |
| | 12:15-12:35 | Onofrio SEMERARO | Transition Delay In A Boundary Layer Using Localized Sensors And Actuators <i>O. Semeraro, L. Brandt, S. Bagheri, J.O. Pralits, B. Belson, D. S. Henningson, C. W. Rowley</i> |
| | 12:35-12:55 | Iman LASHGARI | Instability Of Carreau Fluids Flowing Past A Circular Cylinder <i>I. Lashgari, F. Giannetti, L. Brandt and J.O. Pralits</i> |
| | Lunch | | |
| | Session 5 | Chair: Alessandro Bottaro | |
| | 15:00-15:45 | Spencer SHERWIN | Numerical Stability Studies Of Streamwise Vortices And Swirling Flows <i>S. Sherwin</i> |
| 15:45-16:05 | Kilian OBERLEITHNER | On Global Modes In Turbulent Swirling Jet Experiments <i>K. Oberleithner, Ch. O. Paschereit</i> | |
| 16:05-16:25 | Philippe MELIGA | Optimizing Energy Production From Vortex Induced Vibrations Using An Exact Nonlinear Asymptotic Model <i>Ph. Meliga, J.-M. Chomaz, F. Gallaire</i> | |
| Coffee break | | | |
| Session 6 | Chair: Fulvio Martinelli | | |
| 17:00-17:20 | Vladimir PAREZANOVIC | Sensitivity Of The Global Instability Envelope To A Steady Perturbation In The Bluff Body Wake At Large Re <i>V. PAREZANOVIC, O. CADOT</i> | |
| 17:20-17:40 | Matthew JUNIPER | Combined Local And Global Stability Analysis Of Vortex Breakdown Bubbles And Confined Wakes <i>M. Juniper, U. Qadri, D. Mistry, O. Tammisola</i> | |
| Banquet | | | |

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| Friday | Session 7 | Chair: Dominik Obrist | |
| | 09:00-09:45 | Luca BRANDT | Instability Of A Particle Suspension <i>L. Brandt, J. Klinkenberg, R. De Lange</i> |
| | 09:45-10:05 | Miguel FOSAS | Sound Generation In The flow Around An Aerofoil <i>M. Fosas, D. Sipp and P.J. Schmid</i> |
| | 10:05-10:25 | Miguel HERMANNIS | On High Order Finite Difference Methods For Global Instability Analysis <i>S. Le Clainche, P. Paredes, M. Hermanns, V. Theofilis</i> |
| | Coffee break | | |
| | Session 8 | Chair: Spencer Sherwin | |
| | 11:00-11:20 | Lutz LESSHAFFT | Global Stability Of Hot Subsonic Jets <i>X. Garnaud, L. Lesshafft, P. J. Schmid, P. Huerre</i> |
| | 11:20-11:40 | Dominik OBRIST | By-pass Transition In The Swept Leading-edge Boundary Layer <i>D. Obrist, R. Henniger, L. Kleiser</i> |
| | 11:40-12:00 | Pedro PAREDES | On The PSE-3D Instability Analysis Methodology For Counter-Rotating Axially Inhomogeneous Pair Of Vortices <i>P. Paredes, V. Theofilis, D. Rodriguez</i> |
| | Lunch | | |