

Global Flow Instability and Control Symposium II

Hotel Creta Maris, Crete Greece, June 11-13 2003

FINAL PROGRAM

WEDNESDAY, JUNE 11

07:30 - 09:00

Registration

09:00 - 09:15

Organizing Committee

Welcome Address

Theoretical Approaches I

09:15-10:15

P. Luchini ²³ (invited)

Adjoint Methods in Transient Growth, Global Instabilities and Turbulence Control

10:15-10:45

D. Martinand ⁷ and P.A. Monkewitz ⁷

Three-dimensional Global Modes in Rayleigh-Bénard-Poiseuille Convection with Envelope Formalism

10:45-11:15

P.W. Duck ²²

Non-modal Stability and Breakdown in Corner and Three-Dimensional Boundary Layers

11:15-11:45

BREAK

Flow Control Experiments and Simulations

11:45-12:15

T. Colonius³

Open and Closed-loop Control of Vortex Shedding in a Separated Diffuser

12:15-12:45

L. Kaiktsis¹⁵, P.A. Monkewitz⁷, N. Tylli¹⁶

Passive Control of Flow over a Backward-Facing Step

12:45-13:15

M. Choudhari¹⁴ and M. Khorrami¹⁴

Control of Global Instabilities Contributing to Airframe Noise via Porous Surface Treatment

13:15-13:45

A. Seifert¹⁹

TBA

13:45-15:00

BREAK

Vortical Flows: Theoretical Approaches and Applications

15:00-16:00

J.D. Crouch² (invited)

Predicting Effectiveness for Control of Instabilities in Complex Trailing-Vortex Systems

16:00-16:30

A. Panaras¹⁵ and S. Voutsinas¹⁵

Effect of Counter-Rotating Vortices on the Development of Aircraft Wakes

16:30-17:00

O.N. Ramesh¹² and R.C. Siddarth¹²

Vortex Shedding and its Control over Cones at Low Reynolds-numbers

17:00-18:00

J.-M. Chomaz ⁶, F. Gallaire ⁶ and P. Huerre ⁶ (invited)

Vortex Breakdown, Swirling Flows Local and Global Instabilities and their Control

18:00-20:00

BREAK

20:00-22:00

DISCUSSION SESSION (DS) I

THURSDAY, JUNE 12

Theoretical Approaches II

09:00 – 10:00

T. Bewley ²¹ (invited)

New Strategies for the Efficient Feedback Control of Boundary-layer Flow Systems

10:00 – 10:30

M. Choudhari ¹⁴, C.-L. Chang ¹⁴ and Li Jiang ²⁴

Integrated Transition Prediction for Supersonic Swept Wing Boundary Layers

10:30 – 11:00

B. Uzunoglu ⁵

A Linear Reduced Model for Flow Control in a Rectangular Duct

11:00-11:30

BREAK

Numerical Methods

11:30 – 12:00

J. Ekaterinaris ¹⁰

TBA

12:00 – 12:30

R. Pitt ¹¹, S.J. Sherwin ¹¹ and V. Theofilis ^{25,5}

BiGlobal Stability Analysis of Stenotic Flow

12:30 – 13:00

V. Theofilis ^{25,5}, S.J. Sherwin ¹¹ and M. Deville ⁷

High-order Numerical Methods for BiGlobal Flow Stability Analysis and Control

13:00-15:00

BREAK

Turbomachinery Applications

15:00-16:00

E. Janke ¹⁷ (invited)

Aspects of Flow Control Application in Gas Turbines

16:00-16:30

H.F. Fasel ²⁰

Control of Separation for Low Pressure Turbine Blades: Numerical Simulations

16:30-17:00

A. Kalfas ⁷

TBA

17:00-19:00

DISCUSSION SESSION (DS) II

19:00-21:00

CONFERENCE DINNER

FRIDAY, JUNE 13

09:00-11:00

DS Chairpersons Reporting / Plenary Session

Presentation of DS Results: Closed and Open Issues

11:00-12:00

Organizing Committee

Conclusions and End of the Symposium

OBSERVERS

T. Beutner ¹, W. Donaldson ⁸, J. LaGraff ¹⁸

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