UNIVERSITÀ DEGLI STUDI DI GENOVA

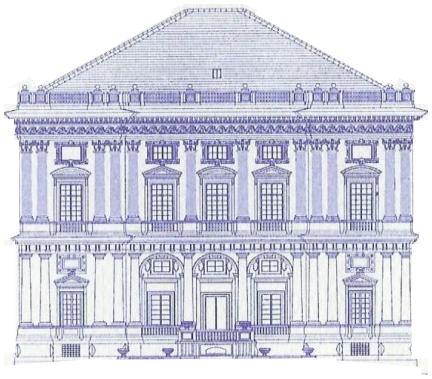
**Dottorato in Fluidodinamica e Processi dell'Ingegneria Ambientale**

# AVVISO DI SEMINARIO

## "Optimal disturbances and transition to turbulence in shear flows"


**Antonios Monokrousos**
KTH - Mechanics
Stockholm, Sweden


Martedì 29 Giugno, 2010 – ore 10.00
Facoltà di Ingegneria,
Aula A11
Villa Giustiniani Cambiaso



Per informazioni contattare il
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## Optimal disturbances and transition to turbulence in shear flows

The stability of boundary-layer flows is studied by means of Lagrange optimisation. The optimal initial condition problem is considered using both the linear and the non-linear Navier-Stokes equations. Inspired by variational principles of non-equilibrium thermodynamics, various physical quantities are tested as objective functions while seeking the optimal path to turbulence.

## Biographical sketch of Antonios Monokrousos

Antonios Monokrousos has studied Physics for five years in the Univerisity of Athens where he graduated in 2005. After that he was a Master's student at KTH Mechanics, Stockholm, for two years in the program on Engineering Mechanics. From 2007 he works as PhD student in the same department in the group of Prof. Dan S. Henningson within the area of "stability, transition and control of shear flows".

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