

ERCOFTAC SIG 33 Workshop on Flow Control, Abisko, April 25-27, 2001.

Program

Tuesday, April 24

18:00-19:00 DINNER

20:00 RECEPTION

Wednesday, April 25

8:30 Lennart Löfdahl,
"Flow Control and MEMS research"

9:00 Tom Bewley,
"Spatially localized convolution kernels for decentralized
control and estimation of plane channel flow"

9:30 Markus Högberg,
"Linear optimal control applied to spatial boundary layers"

10:00 COFFEE

10:30 Uwe Dallmann
"Experimental investigations of active and dynamic instability
control of turbulent separated flows"

11:00 Fredrik Lundell,
"Growth and decay of localized streak instabilities"

11:30 LUNCH

13:00 VISIT TO SCIENCE (CLIMATE) STATION IN ABISKO

18:00-19:00 DINNER

19:15 Bill George
"Implications of Recent POD Studies for Control of Free Shear
Flows"

19:45 Michael Hinze,
"Semidiscretization and error estimates for distributed control
of the instationaty Navier-Stokes equations"

Thursday, April 26

8:30 John Kim,
"Success and Limitation of Linear Controllers in Nonlinear Flows"

9:00 Max Gunzburger
"Optimization based methods for fluid-structure interaction,
simulation and optimization"

9:30 Jan Pralits
"Adjoint-based optimization of steady suction for disturbance
control in incompressible boundary layers"

10:00 COFFEE

10:30 Karl Zajac

"Flow Control Applications at SAAB" (NA)
11:00 Jens Österlund,
"The design of a new flow control experiment at FOI/FFA" (NA)
11:15 Olle Törnblom,
"Experimental flow control of in a 2D diffusor" (NA)

11:30 LUNCH

13:00 VISIT TO "SAMEVISET" (for those not skiing)

18:00-19:00 DINNER

19:00 Jörgen Held
"Fluid mechanics supported by the Swedish Energy Administration"
19:15 Magnus Olsson
"CFD at Volvo Car Corporation - prime movers and future focus"
19:30 Dan Henningson
"Support for flow control research in Sweden"
19:45 Tom Bewley: Brain-storming and discussion session
"Future directions in flow control research"

21:15 WINE and CHEESE

Friday, April 27

8:30 Peter Corbett
"Optimal control of non-modal disturbances in boundary layers"
9:00 Alex Bottaro
"Eigenvalue sensitivity to base flow variations"
9:30 Paolo Luchini,
"Optimal growth-rate computations from noisy base-flow data"

10:00 COFFEE

10:30 Summary of group discussions

12:00 LUNCH

List of participants

1. Dan Henningson
2. Håkan Gustavsson
3. Martin Berggren
4. Tom Bewley
5. Max Gunzburger
6. Bassam Bamieh (not present)
7. Michael Hinze
8. Petros Koumoutsakos (not present)
9. Alex Bottaro
10. Paolo Luchini
11. Simone Zuccher
12. Lennart Löfdahl
13. Ardeshir Hanifi
14. Uwe Dallmann
15. John Kim
16. Raffaella Donelli

17. Magnus Olsson
18. Jens Österlund
19. Fredrik Lundell
20. Jan Pralits
21. Peter Corbett
22. Ori Levin
23. Jörgen Held
24. Mattias Chevallier
25. Olle Törnblom
26. Markus Högberg
27. Björn Lindgren
28. Bill George
29. Karl Zajac
30. Peter Johansson