

Please send this report to the Secretary of the European Mechanics Council, Professor Bengt Lundberg, Dept. of Mechanical Engineering, Luleå University of Technology, S-951 87 Luleå, Sweden, within one month after the Colloquium.

General

Euromech Colloquium No: 328

Title: "Management and Active Control of Turbulent Shear Flows"

Co-Chairman: H.H. Fernholz, TU Berlin
H.E. Fiedler, TU Berlin

Place and country: Berlin, Germany

Dates: October, 4 - 6, 1994

Finance

The conference fee of DM 50,-- included refreshments during coffee breaks, the book of abstracts, secretarial assistance, and the buffet dinner during the open house in the HFI.

Funding: DFG, Deutsche Forschungsgemeinschaft
DLR, Deutsche Forschungsanstalt für Luft- und Raumfahrt e.V.

Participation

Total number of participants: 58 and some locals

Distribution of participants by country:

<u>Code</u>	<u>Country</u>	<u>Number</u>
CH	Switzerland	5
CS	Czech Republic	1
D	Germany	24
E	Spain	1
F	France	10
GB	Great Britain	6
GUS	GUS	1
I	Italy	3
PL	Poland	1

Others: Canada: 1, USA: 1, Australia: 1, Israel: 3.

Management and active control of turbulent shear flows is an interesting, timely, and important topic in fluid mechanics which has been pursued so far more actively in the United States than in Europe. This was the first European meeting of this kind as such well received by our colleagues from different European countries.

The session topics were:	Boundary layers - drag control	(3)
	Management of separation	(1)
	Management of lift/ separation	(1)
	Management of mixing layers	(1)
	Management of flows with sudden expansion	(1)
	Management of jet flows	(1)
	Management of wake flows	(2)
	Miscellaneous	(2)

The time allotted to oral presentations was 20 minutes plus 5 minutes for discussion. In addition there were 5 general discussion sessions of 25 minutes each and a round table discussion at the end of the colloquium. During the open house participants could visit the laboratories of the HFI.

Oral presentations were interesting and closely connected with the topic, discussions were lively, stimulating, and conducted in an open and constructive manner.

The Chairman announced the establishment of a new working group "Control and management of turbulent shear flows" within the framework of COST F1 which would be coordinated by F. Nieuwstadt (Delft) and H.H. Fernholz. The need for a further colloquium in this field was recognized in two or three years time since the contributions to the subject of the Colloquium are growing in number. Several researchers from laboratories outside Berlin were interested in a future research cooperation.

From this we conclude that Euromech Colloquium 328 has been a success in the best tradition of Euromech.

