

# EUROMECH

EUROPEAN MECHANICS SOCIETY

# Final Report

Please send this report to the Secretary-General of EUROMECH, within one month after the Colloquium.

EUROMECH Colloquium No: 347

Title: STABILITY AND BIFURCATION IN SOLID MECHANICS

Dates and location: MAY 13-15, 1996 National Education and Research Ministry Paris 5, France

Chairman: Q.S. NGUYEN

Co-Chairman: M. POTIER-FERRY

Is there need of another Colloquium on the same or a related subject? Which year? 2000

Full registration fee: 1800 FF (VAT included)

What other funding was obtained? 40.000 FF sponsor by EDF, CEA, CSMA, AUM ...

What were the participants offered?  
3 restaurant lunch, cocktail, banquet, opera of Paris + abstracts

Number of members of EUROMECH (reduced registration fee): 3

Number of non-members of EUROMECH (full registration fee):  $\approx 50$

Number of participants from each country:

Austria	<u>1</u>	Germany	<u>1</u>	Romania	<u>   </u>
Belgium	<u>   </u>	Great Britain	<u>6</u>	Russia	<u>1</u>
Byelorussia	<u>   </u>	Greece	<u>2</u>	Slovakia	<u>   </u>
Bosnia	<u>   </u>	Hungary	<u>   </u>	Slovenia	<u>   </u>
Bulgaria	<u>   </u>	Ireland	<u>3</u>	Spain	<u>1</u>
Croatia	<u>   </u>	Italy	<u>6</u>	Sweden	<u>1</u>
Czech Republic	<u>   </u>	Latvia	<u>   </u>	Switzerland	<u>   </u>
Denmark	<u>1</u>	Lithuania	<u>   </u>	Ukraine	<u>   </u>
Estonia	<u>   </u>	Netherlands	<u>2</u>	Yugoslavia	<u>   </u>
Finland	<u>2</u>	Norway	<u>   </u>	Others	<u>1</u>
France	<u>35</u>	Poland	<u>1</u>	USA	<u>5</u>
Georgia	<u>   </u>	Portugal	<u>1</u>	Total	<u>70</u>

Please turn

The EUROMECH COLLOQUIUM 347 "Stability and Bifurcation in Solid Mechanics" has been organized in the center of Paris, at the Ministry of National Education and Research PARIS 5, France during the period OF May 13-15, under the hospice of the EUROPEAN MECHANICS SOCIETY and sponsored by a certain number of Public and Private Organisms such as Electricité de France, Commissariat à Energie Atomique, Délégation Générale à l'Armement, Association Universitaire de Mécanique, Computation and Structural Mechanics Association.

The participation included more than 70 scientists essentially from Europe, most of them come from different Universities but also from some Technical Centers of industry.

This Euromech Colloquium has been an opportunity for researchers from all Engineering disciplines and Applied Mathematics to review the state of the art in Stability and Bifurcation of solid systems and to discuss recent trends since the previous Euromech meeting on the same subject organized by Pr. Ogden at Glasgow in 1989. Stability of materials and structures under static and dynamic loading are of interests and the following five topics have been much discussed through the technical sessions :

- Hopf bifurcation , Dynamic Aspects.
- Elastic buckling : Problem of multiple modal buckling. Computation and theoretical aspects.
- Plastic and visco-plastic effects on buckling analysis.
- Localization and Micro buckling in composites.
- Stability under contact with friction.

The discussions and the presentations are particularly interesting due to the presence of most well-known specialists on the subject.

It has been suggested that such a program of meeting should be reconducted again in a near future.

Paris , november 20<sup>th</sup>

