

EUROMECH Colloquium 396
Vortical Structures in Rotating and Stratified Fluids
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Foreword

Roberto Verzicco
(Chairman of EUROMECH 396)

Politecnico di Bari, Dipartimento di Ingegneria Meccanica e Gestionale, Via Re David 200, 70125 Bari, Italy

This special issue of the Journal contains a representative selection of papers presented at the EUROMECH Colloquium 396 held in Cortona (Arezzo, Italy) on June 22nd–25th 1999 in the ‘Palazzone’, a beautiful 16th century building owned by the Scuola Normale Superiore di Pisa. The location and the organization of the meeting was the same as EUROMECH 305 ‘Vorticity Dynamics’ organized by P. Orlandi and E.J. Hopfinger, of which this EUROMECH Colloquium is a follow-up. 60 participants from more than 13 countries attended the Colloquium, which was organized in 8 sessions with a total of 5 invited lectures (C. Cambon, G. Carnevale, D. Etling, J. Fernando and P. Orlandi), 42 contributed oral presentations, and some poster presentations.

The subject matter was roughly divided into Geophysical Vortices, Topographic Effects and Interactions with Boundaries, Mixing and Dispersion, Effects of Rotation and Stratification on Shear Flows and Turbulence. The contributions of this Journal issue have been selected so that they illustrate the main topics of the Colloquium. This collection of papers, therefore, provides a good introduction to the wide range of problems associated with rotation and stratification in fluid dynamics. Professor Gert Jan van Heijst (co-chairman) and myself would like to thank the invited speakers for their contributions to this volume and for their help in the selection of the additional papers. The organization of this successful Colloquium was made possible thanks to the support of Università di Roma ‘La Sapienza’, Eindhoven University of Technology, the European Science Foundation TAO, the European Research Office (U.S. Army), the European Office of Aerospace Research and Development, the Office of Naval Research (International Field Office), ERCOFTAC, EUROMECH; these institutions are gratefully acknowledged.