
Review of *Tubes, Sheets and Singularities in Fluid Dynamics: Proceedings of the NATO ARW* edited by K. Bajer, and H. K. Moffatt

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During the fall of 2001, 59 participants from 12 countries met in Zakopane, Poland, to discuss the fluid dynamics of vortex tubes and sheets, often considered to be the basic building blocks of fluid flow at high Reynolds numbers, whether laminar or turbulent in nature. Their structure, stability, and evolution affect many important physical processes such as magnetic flux tubes in magnetohydrodynamics and the development and maintenance of turbulent shear flows. These coherent structures occur at scales rang-

ing from astronomical (Sun's corona) to infinitesimal (compressible boundary layers).

The volume is dedicated to Dr. Anthony E. Perry (1937–2001), previously Professor at University of Melbourne and pioneer and creative researcher in the fields of turbulence, three-dimensional flow separation, flow pattern topology, and vortex shedding processes.

The proceedings are organized into six discrete sections which deal respectively with (1) vortex structure, stability, and evolution; (2) singular vortex filaments; (3) magnetic structure, topology and reconnection; (4) turbulent flows; (5) finite-time singularity problems; and (6) Stokes flows and boundary behavior. The 379-page volume is well organized, the individual papers and figures are carefully edited, and the figures and graphics are excellent. The editors have provided a detailed topic index, which makes the information very accessible.

This volume will make a timely and valuable addition to the bookshelves of those concerned with the fundamental physics and mathematics of fluid flow structure and the development of turbulence.