J. Fluid Mech. (2000), *vol.* 415, *pp.* 346–347. Printed in the United Kingdom

BOOK REVIEWS

Boundary Layer Theory, 8th Edn. By H. SCHLICHTING & K. GERSTEN. Springer 2000. 799 pp. ISBN 3-540-66270-7. DM 179.

This is a new edition of the redoubtable classic. Much of it is a revision of the earlier material, but there is sufficient addition to give an introduction to interactive boundary-layer theory and modern numerical methods, both of which were in an early stage when the previous edition appeared. The section on stability and turbulence has been extensively re-written to incorporate recent developments, and describes the more commonly used turbulence models.

The re-presentation and up-dating of the classical material follows Schlichting's style of clarity in setting out the mathematics, meticulous definition of dimensional variables and the inclusion of meaningful diagrams and comparison with experiment. This makes the material accessible to both theoretical and practical fluid dynamicists. The style for the new sections on interactive boundary-layer theory and numerical methods is, of necessity, different, for each topic would fill a separate volume. To make some space, the short section on slow flow in the previous edition has been omitted, although it would probably have been preferable to reduce the material on approximate and integral methods as these have largely been made redundant by the high-speed computer.

The volume is attractively produced, seems to have very few misprints and has an extensive bibliography. As there is a considerable amount of additional meterial in this new edition it does not seem unreasonably priced.

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SHORT NOTICE

Annual Review of Fluid Mechanics. Vol. 32. Edited by J. L. LUMLEY, M. VAN DYKE & H. L. REED. Annual Reviews, 2000. 873 pp. ISBN 0 8243 0732 1.

Here is a list of articles and authors in the current volume of this periodical.

Scale-Invariance and Turbulence Models for Large-Eddy Simulation, Charles Meneveau and Joseph Katz
Hydrodynamics of Fishlike Swimming, M. S. Triantafyllou, G. S. Triantafyllou, and D. K. P. Yue
Mixing and Segregation of Granular Materials, J. M. Ottino and D. V. Khakhar
Fluid Mechanics in the Driven Cavity, P. N. Shankar and M. D. Deshpande
Active Control of Sound, N. Peake and D. G. Crighton
Laboratory Studies of Orographic Effects in Rotating and Stratified Flows, Don L. Boyer and Peter A. Davies
Passive Scalars in Turbulent Flows, Z. Warhaft
Capillary Effects on Surface Waves, Marc Perlin and William W. Schultz
Liquid Jet Instability and Atomization in a Coaxial Gas Stream, J. C. Lasheras and E. J. Hopfinger

Shock Wave–Turbulence Interactions, Yiannis Andreopoulos, Juan H. Agui, and George Briassulis

Flows in Stenotic Vessels, S. A. Berger and L.-D. Jou

Homogeneous Dynamos in Planetary Cores and in the Laboratory, F. H. Busse

Magnetohydrodynamics in Rapidly Rotating Spherical Systems, Keke Zhang and Gerald Schubert

Sonoluminescence: How Bubbles Turn Sound into Light, S. J. Putterman and K. R. Weninger

The Dynamics of Lava Flows, R. W. Griffiths

Turbulence in Plant Canopies, John Finnigan

Vapor Explosions, Georges Berthoud

Fluid Motions in the Presence of Strong Stable Stratification, James J. Riley and Marie-Pascale Lelong

The Motion of High-Reynolds-Number Bubbles in Inhomogeneous Flows, J. Magnaudet and I. Eames

Recent Developments in Rayleigh-Bénard Convection, Eberhard Bodenschatz, Werner Pesch, and Guenter Ahlers

Flows Induced by Temperature Fields in a Rarefied Gas and their Ghost Effect on the Behavior of a Gas in the Continuum Limit, Yoshio Sone