

INDEX

- ACRIVOS, ANDREAS & GODDARD, J. D. Asymptotic expansions for laminar forced-convection heat and mass transfer. Part 1. Low speed flows, 273
- BAGANOFF, D. Experiments on the wall-pressure history in shock-reflexion processes, 209
- BALL, F. K. Second-class motions of a shallow liquid, 545
- BANKS, ROBERT B. & BHAVAMAI, ANUSORNANT Experimental study of the impingement of a liquid jet on the surface of a heavier liquid, 229
- BENTON, EDWARD R. Laminar boundary layer on an impulsively started rotating sphere, 611
- BERGER, S. A. *See* VIVIAND, H. & BERGER, S. A.
- BHAVAMAI, ANUSORNANT *See* BANKS, ROBERT B. & BHAVAMAI, ANUSORNANT
- BISSHOPP, F. E. & NIILER, P. P. Onset of convection in a rapidly rotating sphere, 459
- BRADBURY, L. J. S. The structure of a self-preserving turbulent plane jet, 31
- BROWN, S. N. & STEWARTSON, K. On similarity solutions of the boundary-layer equations with algebraic decay, 673
- BUSSE, F. *See* SCHLÜTER, A., LOERTZ, D. & BUSSE, F.
- BUTLER, D. S. One-dimensional flow in an ionizing gas, 1
- CARRIER, G. F. Some effects of stratification and geometry in rotating fluids, 145
- CHU, BOA-TEH. *See* WEGENER, PETER P., CHU, BOA-TEH & KLIKOFF, W. A.
- COX, R. G. The steady motion of a particle of arbitrary shape at small Reynolds numbers, 625
- CRIMI, P. *See* SHEN, S. F. & CRIMI, P.
- CUMBERBATCH, E. Effects of viscosity on ship waves, 471
- DEARDORFF, J. W. & WILLIS, G. E. The effect of two-dimensionality on the suppression of thermal turbulence, 337
- ELDER, J. W. Laminar free convection in a vertical slot, 77
- ELDER, J. W. Turbulent free convection in a vertical slot, 99
- FERNHOLZ, H. *See* WILLE, R. & FERNHOLZ, H.
- FOX, J. A. *See* LESSEN, M., FOX, J. A. & ZIEN, H. M.
- GADD, G. E. & GRANT, S. Some experiments on cavities behind disks, 645
- GESSNER, F. B. & JONES, J. B. On some aspects of fully developed turbulent flow in rectangular channels, 689
- GODDARD, J. D. *See* ACRIVOS, ANDREAS & GODDARD, J. D.
- GORDON, A. R. & HELLIWELL, J. B. Magnetogasdynamics deflagration under the Chapman-Jouguet condition, 779
- GRANT, S. *See* GADD, G. E. & GRANT, S.
- HAYASI, NISIKI Similarity of the two-dimensional and antisymmetric boundary-layer flows for purely viscous non-Newtonian fluids, 293
- HELLIWELL, J. B. *See* GORDON, A. R. & HELLIWELL, J. B.
- HERBERT, D. M. A laminar jet in a rotating fluid, 65
- HORLOCK, J. H. & WORDSWORTH, J. The three-dimensional laminar boundary layer on a rotating helical blade, 305
- HUGHES, T. H. & REID, W. H. On the stability of the asymptotic suction boundary-layer profile, 715
- HUGHES, T. H. & REID, W. H. The stability of laminar boundary layers at separation, 737

- HUNT, J. C. R. & STEWARTSON, K. Magnetohydrodynamic flow in rectangular ducts. II, 563
- JONES, J. B. *See* GESSNER, F. B. & JONES, J. B.
- KALONI, P. N. On the flow of certain orientable fluids between two co-axial cones, 511
- KLIKOFF, W. A. *See* WEGENER, PETER P., CHU, BOA-TEH & KLIKOFF, W. A.
- LAVAN, Z. & FEJER, A. A. Luminescence in supersonic swirling flows, 173
- LESSEN, M., FOX, J. A. & ZIEN, H. M. On the inviscid stability of the laminar mixing of two parallel streams of a compressible fluid, 355
- LORTZ, D. A stability criterion for steady finite amplitude convection with an external magnetic field, 113
- LORTZ, D. *See* SCHLÜTER, A., LORTZ, D. & BUSSE, F.
- MAXWORTHY, T. Accurate measurements of sphere drag at low Reynolds numbers, 369
- MAXWORTHY, T. An experimental determination of the slow motion of a sphere in a rotating viscous fluid, 373
- MICHALKE, A. On spatially growing disturbances in an inviscid shear layer, 521
- MOORE, D. W. The velocity of rise of distorted gas bubbles in a liquid of small viscosity, 749
- NEWMAN, J. N. Propagation of water waves past long two-dimensional obstacles, 23
- NEWMAN, J. N. Propagation of water waves over an infinite step, 399
- NIHLER, P. P. *See* BISCHOPP, F. E. & NIHLER, P. P.
- PARTRIDGE, B. A. *See* ROWE, P. N. & PARTRIDGE, B. A.
- PATEL, V. C. Calibration of the Preston tube and limitations on its use in pressure gradients, 185
- PLATZMAN, GEORGE W. The spectral dynamics of laminar convection, 481
- REID, W. H. *See* HUGHES, T. H. & REID, W. H.
- REYNOLDS, A. J. The swimming of minute organisms, 241
- ROWE, P. N. & PARTRIDGE, B. A. Note on Murray's paper on bubbles in fluidized beds, 583
- SCHLÜTER, A., LORTZ, D. & BUSSE, F. On the stability of steady finite amplitude convection, 129
- SHEN, S. F. & CRIMI, P. The theory for an oscillating thin airfoil as derived from the Oseen equations, 585
- SHI, YUN-YUAN. Low Reynolds numbers flow past an ellipsoid of revolution of large aspect ratio, 657
- STEWARTSON, K. *See* BROWN, S. N. & STEWARTSON, K.; HUNT, J. C. R. & STEWARTSON, K.
- TALLMADGE, J. A. *See* WHITE, D. A. & TALLMADGE, J. A.
- TOWNSEND, A. A. Self-preserving development within turbulent boundary layers in strong adverse pressure gradients, 767
- VAN DEN DRIESEN, P. The effect of a non-linear basic temperature profile on the forced flow of a viscous liquid non-uniformly heated from below, 385
- VIVIAND, H. & BERGER, S. A. The base-flow and near-wake problem at very low Reynolds numbers. Part 1. The Stokes approximation, 417
- VIVIAND, H. & BERGER, S. A. The base-flow and near-wake problem at very low Reynolds numbers. Part 2. The Oseen approximation, 439
- WEGENER, PETER P., CHU, BOA-TEH & KLIKOFF, W. A. Weak waves in relaxing flows, 787
- WHITE, D. A. & TALLMADGE, J. A. Static menisci on the outside of cylinders, 325

- WILLE, R. & FERNHOLZ, H. Report on the first European Mechanics Colloquium, on the Coanda effect, 801
- WILLIS, G. E. *See* DEARDORFF, J. W. & WILLIS, G. E.
- WOODS, L. C. Density waves in low-pressure plasma columns, 315
- WORDSWORTH, J. *See* HORLOCK, J. H. & WORDSWORTH, J.
- YIH, CHIA-SHUN On large-amplitude magnetohydrodynamics, 261
- ZIEN, H. M. *See* LESSEN, M., FOX, J. A. & ZIEN, H. M.

REVIEWS

- Konforme Abbildung*, 624
- Elements of Compressible Flow*, 820
- Symposium Transsonicum*, 820
- Perturbation Methods in Fluid Mechanics*, 822
- Design and Performance of Centrifugal and Axial Flow Pumps and Compressors*, 825
- The Gulf Stream: A Physical and Dynamical Description*, 825
- Fluid Mechanics*, 826
- Fluid Mechanics for Civil Engineers*, 826

SHORTER NOTICES

- Pumps and Blowers: Two-Phase Flow*, 827
- Ionized Gases*, 828
- Advances in Theoretical Physics*, 828
- Tenth Symposium (International) on Combustion*, 828