

INDEX

- ABAS, S. The effect of a parallel magnetic field on the stability of free boundary-layer type flows of low magnetic Reynolds number, 243
- ANAND, R. K. *See* QUARMBY, ALAN & ANAND, R. K.
- BAN, S. D. & KUERTI, G. The interaction region in the boundary layer of a shock tube, 109
- BEARDSLEY, R. C. A laboratory model of the wind-driven ocean circulation, 255
- BLACK, JARED L. *See* MEI, CHIANG C. & BLACK, JARED L.
- BUCKMASTER, JOHN. Separation and magnetohydrodynamics, 481
- BUSH, WILLIAM B. *See* CROSS, ARTHUR K. & BUSH, WILLIAM B.
- CALVERT, R. T. & MELCHER, J. R. Stability and dynamics of rotating dielectrophoretic equilibria, 721
- CHEN, W. Y. *See* VAN ATTA, C. W. & CHEN, W. Y.
- CHENG, H. K. *See* LEE, RICHARD S. & CHENG, H. K.
- CHOW, CHUEN-YEN. Swirling flow in tubes of non-uniform cross-sections, 843.
- CONTI, RAUL & VAN DYKE, MILTON. Reacting flow as an example of a boundary layer under singular external conditions, 513
- CRIGHTON, D. G. & FLOWCS WILLIAMS, J. E. Real space-time Green's functions applied to plate vibration induced by turbulent flow, 305
- CROSS, ARTHUR K. & BUSH, WILLIAM B. Hypersonic weak interaction solutions for flow past a very slender axisymmetric body, 547
- DOWELL, E. H. Non-linear theory of unstable plane Poiseuille flow, 401
- FLOWCS WILLIAMS, J. E. *See* CRIGHTON, D. G. & FLOWCS WILLIAMS, J. E.
- FIELDER, H. *See* WYGNANSKI, I. & FIELDER, H.
- GASTER, M. Vortex shedding from slender cones at low Reynolds numbers, 565
- GEBHART, B. & MOLLENDORF, J. Viscous dissipation in external natural convection flows, 97
- GEBHART, B. *See* HIEBER, C. A. & GEBHART, B.
- GOLDIN, MICHAEL, YERUSHALMI, JOSEPH, PFEFFER, ROBERT & SHINNAR, REUEL. Breakup of a laminar capillary jet of viscoelastic fluid, 689
- GOLDSWORTHY, F. A. On the motion established by a constant energy explosion followed by an expanding piston, 25
- HARPAVAT, G. *See* LESSEN, M., HARPAVAT, G. & ZIEN, H. M.
- HEAD, M. R. *See* PATEL, V. C. & HEAD, M. R.
- HIEBER, C. A. & GEBHART, B. Mixed convection from a sphere at small Reynolds and Grashof numbers, 137
- HUEBNER, A. L. Disintegration of charged liquid jets, 679
- HUNT, J. C. R. & STEWARTSON, K. Some electrically driven flows in magnetohydrodynamics. Part 3. The asymptotic theory for flow between circular electrodes, 225
- HUTT, P. K. *See* THORPE, S. A., HUTT, P. K. & SOULSBY, R.
- IVES, J. *See* ORTLOFF, C. R. & IVES, J.
- JONES, W. P. *See* LAUNDER, B. E. & JONES, W. P.
- KELLER, JOSEPH B. & MOW, VAN C. Internal wave propagation in an inhomogeneous fluid of non-uniform depth, 365

- KRISHNA, D. V. & SARMA, L. V. Motion of an axisymmetric body in a rotating stratified fluid confined between two parallel plates, 833
- KUERTI, G. *See* BAN, S. D. & KUERTI, G.
- LAUNDER, B. E. & JONES, W. P. Sink flow turbulent boundary layers, 817
- LEE, RICHARD S. & CHENG, H. K. On the outer-edge problem of a hypersonic boundary layer, 161
- LESSEN, M., HARPAVAT, G. & ZIEN, H. M. Stability of three-dimensional laminar and turbulent shear layers, 39
- MACKINNON, R. F., MULLEY, R. & WARREN, F. W. G. Some calculations of gravity wave resistance in an inviscid stratified fluid, 61
- MEI, CHIANG C. & BLACK, JARED L. Scattering of surface waves by rectangular obstacles in waters of finite depth, 499
- MELCHER, J. R. *See* CALVERT, R. T. & MELCHER, J. R.
- MICHALKE, A. A note on spatially growing three-dimensional disturbances in a free shear layer, 765
- MOLLENDORF, J. *See* GEBHART, B. & MOLLENDORF, J.
- MORAN, JOHN P. & VAN MOORHEM, WILLIAM K. Diffraction of a plane shock by an analytic blunt body, 127
- MORTON, B. R. The strength of vortex and swirling core flows, 315
- MOW, VAN C. *See* KELLER, JOSEPH B. & MOW, VAN C.
- MULLEY, R. *See* MACKINNON, R. F., MULLEY, R. & WARREN, F. W. G.
- NAYFEH, ALI HASAN. On the non-linear Lamb-Taylor instability, 619
- NEWELL, ALAN C. & WHITEHEAD, J. A. Finite bandwidth, finite amplitude convection, 279
- NICKERSON, E. C. Upper bounds on the torque in cylindrical Couette flow, 807
- NILER, P. P. & WHITE, H. J. Note on the swimming deceleration of a dolphin, 613
- ORTLOFF, C. R. & IVES, J. On the dynamic motion of a thin flexible cylinder in a viscous stream, 713
- PATEL, V. C. & HEAD, M. R. Some observations on skin friction and velocity profiles in fully developed pipe and channel flows, 181
- PFEFFER, ROBERT. *See* GOLDIN, MICHAEL, YERUSHALMI, JOSEPH, PFEFFER, ROBERT & SHINNAR, REUEL
- QUARMBY, ALAN & ANAND, R. K. Axisymmetric turbulent mass transfer in a circular tube, 433
- QUARMBY, ALAN & ANAND, R. K. Non-axisymmetric turbulent mass transfer in a circular tube, 457
- RAMANAIAH, G. Magnetogasdynamic thrust bearing with an axial pinch, 673
- RIBNER, H. S. Quadrupole correlations governing the pattern of jet noise, 1
- SALVESON, NILS. On higher-order wave theory for submerged two-dimensional bodies, 415
- SARMA, L. V. *See* KRISHNA, D. V. & SARMA, L. V.
- SCHMITT-VON SCHUBERT, BARBARA. Existence and uniqueness of normal shock waves in gas-particle mixtures, 633
- SEGEL, LEE A. Distant sidewalls cause slow amplitude modulation of cellular convection, 203
- SHERCLIFF, J. A. Anisotropic surface waves under a vertical magnetic force, 353
- SHINNAR, REUEL. *See* GOLDIN, MICHAEL, YERUSHALMI, JOSEPH, PFEFFER, ROBERT & SHINNAR, REUEL
- SKALAK, RICHARD. *See* WANG, HENRY & SKALAK, RICHARD

- SOMON, J. P. The dynamical instabilities of cylindrical shells, 769
- SOULSBY, R. *See* THORPE, S. A., HUTT, P. K. & SOULSBY, R.
- SOZOU, C. & SWITHEBANK, J. Adiabatic transverse waves in a rotating fluid, 657
- STEPHENSON, C. J. Magnetohydrodynamic flow between rotating coaxial disks, 335
- STEWARTSON, K. *See* HUNT, J. C. R. & STEWARTSON, K.
- SWITHEBANK, J. *See* SOZOU, C. & SWITHEBANK, J.
- TAM, CHRISTOPHER K. W. The drag on a cloud of spherical particles in low Reynolds number flow, 537
- THORPE, S. A., HUTT, P. K. & SOULSBY, R. The effect of horizontal gradients on thermal convection, 375
- VAN ATTA, C. W. & CHEN, W. Y. Measurements of spectral energy transfer in grid turbulence, 743
- VAN DYKE, MILTON. *See* CONTI, RAUL & VAN DYKE, MILTON
- VAN MOORHEM, WILLIAM K. *See* MORAN, JOHN P. & VAN MOORHEM, WILLIAM K.
- WANG, HENRY & SKALAK, RICHARD. Viscous flow in a cylindrical tube containing a line of spherical particles, 75
- WARREN, F. W. G. *See* MACKINNON, R. F., MULLEY, R. & WARREN, F. W. G.
- WHITE, H. J. *See* NIILER, P. P. & WHITE, H. J.
- WHITEHEAD, J. A. *See* NEWELL, ALAN C. & WHITEHEAD, J. A.
- WILSON, S. The development of Poiseuille flow, 793
- WORTMANN, F. X. Visualization of transition, 473
- WYGNANSKI, I. & FIELDER, H. Some measurements in the self-preserving jet, 577
- YERUSHALMI, JOSEPH. *See* GOLDIN, MICHAEL, YERUSHALMI, JOSEPH, PFEFFER, ROBERT & SHINNAR, REUEL
- YIH, CHIA-SHUN. Note on eigenvalue bounds for the Orr-Sommerfeld equation, 273
- ZIEN, H. M. *See* LESSEN, M., HARPAVAT, G. & ZIEN, H. M.

REVIEWS

- Hydrodynamics*, by Daniel Bernoulli, and *Hydraulics*, by Johann Bernoulli, 855
- Thermodynamics and Fluid Mechanics Convention, 1968*, 857
- Statistical Continuum Theories*, by Mark J. Beran, 859