

INDEX

- ASHKENAS, HARRY. *See* WEGENER
- BENJAMIN, T. BROOKE. The development of three-dimensional disturbances in an unstable film of liquid flowing down an inclined plane, 401
- BENNEY, D. J. A non-linear theory for oscillations in a parallel flow, 209
- BLYTHE, P. A. Comparison of exact and approximate methods for analysing vibrational relaxation regions, 33
- BREACH, D. R. Slow flow past ellipsoids of revolution, 306
- BRETHERTON, F. P. The motion of long bubbles in tubes, 166
- BROWN, D. R. A study of the behaviour of a thin sheet of moving liquid, 297
- BRYSON, A. E. and GROSS, R. W. F. Diffraction of strong shocks by cones, cylinders, and spheres, 1
- CABANNES, HENRI and STAEL, CLAUDE. Singularities of attached shock waves in steady axially symmetric flow, 289
- CASE, K. M. Hydrodynamic stability and the inviscid limit, 420
- CHESTER, W. The effect of a magnetic field on the flow of a conducting fluid past a body of revolution, 459
- CHESTER, W. and MOORE, D. W. The effect of a magnetic field on the flow of a conducting fluid past a circular disk, 466
- CORRSIN, S. *See* KENNEDY
- COSART, W. P. *See* SCHWARZ
- DAVEY, A. Boundary-layer flow at a saddle point of attachment, 593
- DRAZIN, P. G. Discontinuous velocity profiles for the Orr-Sommerfeld equation, 571
- DUNGEY, J. W. The action of Vlasov waves on the velocity distribution in a plasma, 473
- ECKHAUS, WIKTOR. Theory of flame-front stability, 80
- FRANCIS, J. R. D. A further note on the speed of floating bodies in a stream, 48
- GLAUERT, M. B. A study of the magnetohydrodynamic boundary layer on a flat plate, 276
- GOULDINE, MEREDITH C. Magnetohydrodynamic flow constructions with fundamental solutions, 439
- GROSS, R. W. F. *See* BRYSON
- HORLOCK, J. H. *See* MARSH
- HOWARD, LOUIS N. Note on a paper of John W. Miles, 509
- HUGHES, B. A. and STEWART, R. W. Interaction between gravity waves and a shear flow, 385
- JOHANNSEN, N. H. Analysis of vibrational relaxation regions by means of the Rayleigh-line method, 25
- KAHN, F. D. A dispersion relation for waves of finite amplitude in a two-stream plasma, 357
- KANWAL, R. P. Slow steady rotation of axially symmetric bodies in a viscous fluid, 17
- KENNEDY, D. A. and CORRSIN, S. Spectral flatness factor and 'intermittency' in turbulence and in non-linear noise, 366
- KUO, H. L. Solution of the non-linear equations of cellular convection and heat transport, 611
- LIEPMANN, HANS W. Gaskinetics and gasdynamics of orifice flow, 65

- LIN, C. C. Some mathematical problems in the theory of the stability of parallel flows, 430
- LONGUET-HIGGINS, M. S. and STEWART, R. W. The changes in amplitude of short gravity waves on steady non-uniform currents, 529
- LUDFORD, G. S. S. The effect of a very strong magnetic cross-field on a steady motion through a slightly conducting fluid, 141
- MARSH, H. and HORLOCK, J. H. Diabatic gas flows, 513
- MICHAEL, D. H. Note on the stability of plane parallel flows, 525
- MILES, JOHN W. On the stability of heterogeneous shear flows, 496
- MOORE, D. W. *See* CHESTER
- MORTON, B. R. On a momentum-mass flux diagram for turbulent jets, plumes and wakes, 101
- NARASIMHA, RODDAM. Orifice flow at high Knudsen numbers, 371
- PAIN, H. J. and SMY, P. R. Experiments on power generation from a moving plasma, 51
- ROSHKO, ANATOL. Experiments on the flow past a circular cylinder at very high Reynolds number, 345
- SATAPATHY, R. and SMITH, W. The motion of single immiscible drops through a liquid, 561
- SCHWARZ, W. H. and COSART, W. P. The two-dimensional turbulent wall-jet, 481
- SHINNAR, REUEL. On the behaviour of liquid dispersions in mixing vessels, 259
- SMITH, W. *See* SATAPATHY
- SMY, P. R. *See* PAIN
- SPENCE, D. A. The theory of the jet-flap for unsteady motion, 237
- STAEEL, CLAUDE. *See* CABANNES
- STEWART, R. W. *See* HUGHES
- STEWART, R. W. *See* LONGUET-HIGGINS
- STEWART, R. W. The wave drag of wind over water, 189
- TAYLOR, G. I. Deposition of a viscous fluid on the wall of a tube, 161
- TAYLOR, R. J. A new approach to the measurement of turbulent fluxes in the lower atmosphere, 449
- TOWNSEND, A. A. A continuum theory of the isothermal flow of liquid helium II, 113
- WARREN, F. W. G. A stationary-phase approximation to the ship-wave pattern, 584
- WEGENER, PETER P. and ASHKENAS, HARRY. Wind tunnel measurements of sphere drag at supersonic speeds and low Reynolds numbers, 550
- WERNER, J. E. Unsteady interaction of a shock wave with a cellular vortex field, 195
- WU, T. YAO-TSU. Swimming of a waving plate, 321
- YIH, CHIA-SHUN. Flow of a non-homogeneous fluid in a porous medium, 133

REVIEWS

- Handbook of Supersonic Aerodynamics*, 156
- Hydromagnetic Channel Flows*, 158
- Non-Newtonian Fluids*, 315
- Heat Transfer*, 317
- Turbulence. An Introduction to Its Mechanism and Theory*, 319
- Similitude Physique: Exemples d'Applications à la Mécanique des Fluides*, 480
- Turbulent Flows and Heat Transfer*, 635
- The Atmosphere and the Sea in Motion*, 637