

CAMBRIDGE
UNIVERSITY PRESS

25 March 2008

Journal of Fluid Mechanics

VOLUME 599



- 1 Homogeneous turbulence in ferrofluids with a steady magnetic field
K. R. Schumacher, J. J. Riley & B. A. Finlayson
- 29 Two-dimensional instabilities of time-dependent zonal flows: linear shear
A. Natarov, K. J. Richards & J. P. McCreary Jr
- 51 Intermittent turbulence in a pulsating pipe flow
R. Tuzi & P. Blondeaux
- 81 Gaseous detonation propagation in a bifurcated tube
C. J. Wang, S. L. Xu & C. M. Guo
- 111 Spatially distributed control for optimal drag reduction of the flow past a circular cylinder
P. Poncet, R. Hildebrand, G.-H. Cottet & P. Koumoutsakos
- 121 Dense granular flow down an inclined plane: from kinetic theory to granular dynamics
V. Kumaran
- 169 The dynamics of two spherical particles in a confined rotating flow: pedalling motion
K. Mukundakrishnan, H. H. Hu & P. S. Ayyaswamy
- 205 Parametrically forced gravity waves in a circular cylinder and finite-time singularity
S. P. Das & E. J. Hopfinger
- 229 Nonlinear evolution of the zigzag instability in stratified fluids: a shortcut on the route to dissipation
A. Deloncle, P. Billant & J.-M. Chomaz
- 241 The turbulent equilibration of an unstable baroclinic jet
J. G. Esler
- 269 Linear temporal and spatio-temporal stability analysis of a binary liquid film flowing down an inclined uniformly heated plate
J. Hu, H. Ben Hadid, D. Henry & A. Mojtabi
- 299 Closed-form solution of the potential flow in a contracted flume
G. Belaud & X. Litrico
- 309 Three-dimensional instabilities in compressible flow over open cavities
G. A. Brès & T. Colonius
- 341 Onset of motion of a three-dimensional droplet on a wall in shear flow at moderate Reynolds numbers
H. Ding & P. D. M. Spelt
- 363 Admissibility region for rarefaction shock waves in dense gases
C. Zamfirescu, A. Guardone & P. Colonna
- 383 Analysis of sheet-like thermal plumes in turbulent Rayleigh-Bénard convection
O. Shishkina & C. Wagner
- 405 A rotating fluid cylinder subject to weak precession
P. Meunier, C. Eloy, R. Lagrange & F. Nadal
- 441 Quenching of vortex breakdown oscillations via harmonic modulation
J. M. Lopez, Y. D. Cui, F. Marques & T. T. Lim
- 465 Steady-state solidification of aqueous ammonium chloride
S. S. L. Peppin, H. E. Huppert & M. G. Worster
- 477 INDEX TO VOLUME 599