



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

European Journal of Mechanics B/Fluids 21 (2002) 763–765



European Journal of Mechanics B/Fluids, Vol. 21, 2002

Annual Contents

(6 issues)

M.E. Michaelian, T. Maxworthy, L.G. Redekopp – The coupling between turbulent, penetrative convection and internal waves	1
S. Bake, A.V. Ivanov, H.H. Fernholz, K. Neemann, Y.S. Kachanov – Receptivity of boundary layers to three-dimensional disturbances	29
Y.Y. Renardy, M. Renardy, V. Cristini – A new volume-of-fluid formulation for surfactants and simulations of drop deformation under shear at a low viscosity ratio	49
M. Meier, G. Yadigaroglu, B.L. Smith – A novel technique for including surface tension in PLIC-VOF methods	61
C. Karcher, Y. Kolesnikov, O. Andreev, A. Thess – Natural convection in a liquid metal heated from above and influenced by a magnetic field	75
A.V. Bobylev, M. Groppi, G. Spiga – Approximate solutions to the problem of stationary shear flow of smooth granular materials	91
R. Rubinstein, Y. Zhou – Characterization of sound radiation by unresolved scales of motion in computational aeroacoustics	105
F. Sharipov – Application of the Cercignani–Lampis scattering kernel to calculations of rarefied gas flows. I. Plane flow between two parallel plates	113
F. Arena, F. Fedele – A family of narrow-band non-linear stochastic processes for the mechanics of sea waves	125
Book reviews	139

N. Reau, A. Tumin – On harmonic perturbations in a turbulent mixing layer	143
B. Auvity, M. Bellenoue, T. Kageyama – Structure and evolution of the airflow generated by a slender body entry near a tube	157
O.V. Atassi, R.M. Lueptow – A model of flapping motion in a plane jet	171
P.-O. Rusås, J. Grue – Solitary waves and conjugate flows in a three-layer fluid	185
B. Spivak, J.-M. Vanden-Broeck, T. Miloh – Free-surface wave damping due to viscosity and surfactants	207
A. Pinarbasi – Interface stabilization in two-layer channel flow by surface heating or cooling	225

J. Mai, R. Yamane, W.-G. Früh, S. Oshima, A. Ando – Unstable waves at the interface of a diamagnetic liquid column contained in a magnetic fluid	237
A.D. Sneyd – Analysis of parametric resonance in magnetohydrodynamics	247
S.-C. Georgescu, J.-L. Achard, É. Canot – Jet drops ejection in bursting gas bubble processes	265
Book review	281
V.E. Zakharov, A.I. Dyachenko, O.A. Vasilyev – New method for numerical simulation of a nonstationary potential flow of incompressible fluid with a free surface	283
C. Macaskill, A.P. Bassom, A.D. Gilbert – Nonlinear wind-up in a strained planar vortex	293
S. Albensoeder, H.C. Kuhlmann – Three-dimensional instability of two counter-rotating vortices in a rectangular cavity driven by parallel wall motion	307
H.I. Andersson, E. de Korte – MHD flow of a power-law fluid over a rotating disk	317
A.V. Boiko – Receptivity of a flat plate boundary layer to a free stream axial vortex	325
F. Domenichini – Quasiperiodicity and chaos in the dynamics of an elastically mounted circular cylinder	341
H. Cornille, A. d’Almeida – Temperature and pressure criteria for half-space discrete velocity models	355
H. Steiner, T. Hirschler – A self-similar solution of a shock propagation in a dusty gas	371
Book review	381
T. Tagawa, G. Authié, R. Moreau – Buoyant flow in long vertical enclosures in the presence of a strong horizontal magnetic field. Part 1. Fully-established flow	383
A.Y. Gunawan, J. Molenaar, A.A.F. van de Ven – In-phase and out-of-phase break-up of two immersed liquid threads under influence of surface tension	399
M. Quadrio, P. Luchini – Direct numerical simulation of the turbulent flow in a pipe with annular cross section	413
A. Huppertz, H.-H. Fernholz – Active control of the turbulent flow over a swept fence	429
S.D. Harris, D.B. Ingham, I. Pop – Unsteady heat transfer in impulsive Falkner–Skan flows: Constant wall temperature case	447
V.M. Teshukov, S.L. Gavriluk – Kinetic model for the motion of compressible bubbles in a perfect fluid	469
Book reviews	493
U. Rist, U. Maucher – Investigations of time-growing instabilities in laminar separation bubbles	495
P. Carlès, S. Popinet – The effect of viscosity, surface tension and non-linearity on Richtmyer–Meshkov instability ..	511
B. Baccani, F. Domenichini, G. Pedrizzetti – Vortex dynamics in a model left ventricle during filling	527
P.A. Davidson, A. Pothérat – A note on Bödewadt–Hartmann layers	545
A. Kurkin, E. Pelinovsky – Focusing of edge waves above a sloping beach	561

C.E. Siewert – Poiseuille, thermal creep and Couette flow: results based on the CES model of the linearized Boltzmann equation	579
A. Raines – Study of a shock wave structure in gas mixtures on the basis of the Boltzmann equation	599
Book reviews	611
W. Craig, D.P. Nicholls – Traveling gravity water waves in two and three dimensions	615
E. Părău, J.-M. Vanden-Broeck – Nonlinear two- and three-dimensional free surface flows due to moving disturbances	643
D.C. Dunn, N.R. McDonald, E.R. Johnson – The evolution of an initially circular vortex near an escarpment. Part I: analytical results	657
D.C. Dunn – The evolution of an initially circular vortex near an escarpment. Part II: numerical results	677
A. Lecuona, U. Ruiz-Rivas, P. Rodríguez-Aumente – Near field vortex dynamics in axially forced, co-flowing jets: Quantitative description of a low-frequency configuration	701
F.T. Smith, S.N. Brown – On the variation of ‘spot’ properties with pressure gradient	721
P. Biscari – Curvature effects on the surface viscosity of nematic liquid crystals	739
H. Cabannes, L. Pasol, K.G. Roesner – Study of a new semi-continuous model of the Boltzmann equation	751
Book review	761
Annual Contents	763
Author Index	766