Cambridge Core

The new home of Cambridge Journals cambridge.org/core

Cambridge **Core**



Physics Books and Journals from Cambridge University Press

Cambridge University Press is a leading publisher of textbooks, handbooks and monographs that span all areas of physics, from condensed matter physics, to theoretical and mathematical physics.

We also publish a key cluster of journals including the Journal of Plasma Physics, Journal of Fluid Mechanics, and High Power Laser Science and Engineering.

For further details visit: cambridge.org/core-physics

Cambridge **Core**



- S 611 Stretching and mixing in sheared particulate suspensions
 M. Souzy, H. Lhuissier, E. Villermaux & B. Metzger
 - 636 Colour of turbulence A. Zare, M. R. Jovanović & T. T. Georgiou
 - 681 On dispersion of directional surface gravity waves
 T. M. A. Taklo, K. Trulsen, H. E. Krogstad
 & J. C. Nieto Borge
- S 698 Vortex dynamics for flow over a circular cylinder in proximity to a wallG.-S. He, J.-J. Wang, C. Pan, L.-H. Feng,Q. Gao & A. Rinoshika
 - 721 Effects of horizontal pressure gradients on bed destabilization under waves
 - C. Berni, H. Michallet & E. Barthélemy 752 Helically decomposed turbulence
 - A. Alexakis
 - 771 On the receptivity of aerofoil tonal noise: an adjoint analysisM. Fosas de Pando, P. J. Schmid & D. Sipp
 - 792 Flow structure beneath rotational water waves with stagnation points
 - **R. Ribeiro Jr, P. A. Milewski & A. Nachbin** 815 Intermittency of laminar separation bubble on
 - a sphere during drag crisis R. Deshpande, V. Kanti, A. Desai & S. Mittal
 - 841 Elastic deformations driven by non-uniform lubrication flows
 - S. Rubin, A. Tulchinsky, A. D. Gat & M. Bercovici
 - 866 A framework for computing effective boundary conditions at the interface between free fluid and a porous medium U. Lācis & S. Bagheri
 - 890 Eye formation in rotating convection L. Oruba, P. A. Davidson & E. Dormy

JFM Rapids (online only)

S R1 Spectral content of cloud cavitation about a sphere

K. L. de Graaf, P. A. Brandner & B. W. Pearce

R2 Liquid rope coiling: a synoptic view **N. M. Ribe**

- S 905 Gap resonance and higher harmonics driven by focused transient wave groups
 W. Zhao, H. A. Wolgamot, P. H. Taylor & R. Eatock Taylor
 - 940 Wake vortex evolution of square cylinder with a slot synthetic jet positioned at the rear surfaceY. Qu, J. Wang, M. Sun, L. Feng, C. Pan,
 - 966 Continuum perspective of bulk viscosity in compressible fluids X.-D. Li, Z.-M. Hu & Z.-L. Jiang

O. Gao & G. He

- 991 Clustering and preferential concentration of finite-size particles in forced homogeneous-isotropic turbulence
 M. Uhlmann & A. Chouippe
- 1024 Numerical simulation of the initial destabilization of an air-blasted liquid layerG. Agbaglah, R. Chiodi & O. Desjardins
- 1039 The effect of stable thermal stratification on turbulent boundary layer statistics
 O. Williams, T. Hohman, T. Van Buren,
 E. Bou-Zeid & A. J. Smits
- 1076 Effect of viscoelasticity on the soft-wall transition and turbulence in a microchannelS. S. Srinivas & V. Kumaran
- S 1119 Flow around an oscillating circular disk at low to moderate Reynolds numbers
 X. Tian, L. Xiao, X. Zhang, J. Yang, L. Tao & D. Yang
 - 1146 Boussinesq global modes and stability sensitivity, with applications to stratified wakes

K. K. Chen & G. R. Spedding

- 1189 Manning's formula and Strickler's scaling explained by a co-spectral budget model
 S. Bonetti, G. Manoli, C. Manes,
 A. Porporato & G. G. Katul
- S R3 Helical propulsion in shear-thinning fluids
 S. Gómez, F. A. Godínez, E. Lauga &
 R. Zenit
- S R4 Wake structure and thrust generation of a flapping foil in two-dimensional flow
 A. Andersen, T. Bohr, T. Schnipper & J. H. Walther

S indicates supplementary data or movies available online.

ISSN 0022-1120

Journal of Fluid Mechanics

1 The formation of diffusive staircases P. Garaud

812

- 5 Hydro-acoustic frequencies of the weakly compressible mild-slope equation **E. Renzi**
- Boundary-induced autophoresis of isotropic colloids: anomalous repulsion in the lubrication limit
 E. Yariy
- 41 Stress relaxation in a dilute bacterial suspension
 S. Nambian P. P. Natt & C. Subramani
 - S. Nambiar, P. R. Nott & G. Subramanian
- 65 Vapour explosion under hot water depressurizationO. E. Ivashnyov & M. N. Ivashneva
- 129 An analytical theory for the capillary bridge force between spheres
 - N. P. Kruyt & O. Millet
- 152 Combined Rayleigh–Taylor and Kelvin–Helmholtz instabilities on an annular liquid sheet
 - M. Vadivukkarasan & M. V. Panchagnula
- 178 Trapped-wave modes of bodies in channels J. N. Newman
- S 199 Topological fluid mechanics of the formation of the Kármán-vortex street
 M. Heil, J. Rosso, A. L. Hazel & M. Brøns
 - 222 Global and local aspects of entrainment in temporal plumes
 - D. Krug, D. Chung, J. Philip & I. Marusic
 - 251 Experimental study of flow around polygonal cylinders
 S. J. Xu, W. G. Zhang, L. Gan, M. G. Li & Y. Zhou
 - 279 Disentangling the origins of torque enhancement through wall roughness in Taylor–Couette turbulence
 X. Zhu, R. Verzicco & D. Lohse
 - 294 Wave energy absorption by a floating air bagA. Kurniawan, J. R. Chaplin,D. M. Greaves & M. Hann

Contents continued on inside back cover.

- 321 Variation of enstrophy production and strain rotation relation in a turbulent boundary layerP. Bechlars & R. D. Sandberg
- 349 Segregation in dissolving binary-component sessile droplets
 E. Dietrich, M. Rump, P. Lv, E. S. Kooij,
 H. J. W. Zandvliet & D. Lohse
- 370 Secondary instability analysis of crossflow on a hypersonic yawed straight circular cone
 A. J. Moyes, P. Paredes, T. S. Kocian &
 H. L. Reed
- 398 Applicability of Taylor's hypothesis in roughand smooth-wall boundary layers
 D. T. Squire, N. Hutchins,
 C. Morrill-Winter, M. P. Schultz,
 J. C. Klewicki & I. Marusic
- 418 Mixed convection non-axisymmetric Homann stagnation-point flowY. Y. Lok, J. H. Merkin & I. Pop
- 435 Two- and three-dimensional instabilities in the wake of a circular cylinder near a moving wallH. Jiang, L. Cheng, S. Draper & H. An
- S 463 Bistability and hysteresis induced by form drag in nonlinear subcritical and supercritical double-diffusive Lapwood convection in shallow porous enclosures
 R. Rebhi, M. Mamou & P. Vasseur
- S 501 Viscous propulsion in active transversely isotropic mediaG. Cupples, R. J. Dyson & D. J. Smith
 - 525 Mean flow structure in horizontal convection **O. Shishkina**
 - 541 The characteristics of billows generated by internal solitary waves
 M. Carr, J. Franklin, S. E. King,
 P. A. Davies, J. Grue & D. G. Dritschel
 - 578 Scalar gradients in stirred mixtures and the deconstruction of random fields
 T. Le Borgne, P. D. Huck, M. Dentz & E. Villermaux

Cambridge Core For further information about this journal please go to the journal web site at cambridge.org/flm



MIX Paper from responsible sources FSC® C007785

