

## Cambridge Core

Explore today at cambridge.org/core

Cambridge Core



# https://doi.org/10.1017/jfm.2019.792 Published online by Cambridge University Press

### **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** 



https://doi.org/10.1017/jfm.2019.792 Published online by Cambridge University Press

- S 682 Three-dimensional vibrations of multilayered hollow spheres submerged in a complex fluid
  - B. Wu, Y. Gan, E. Carrera & W. Q. Chen
  - 716 Orientation of coastal-zone Langmuir cells forced by wind, wave and mean current at variable obliquity
    - K. Shrestha, W. Anderson, A. Tejada-Martinez & J. Kuehl
  - 744 Viscous effects on the fundamental solution to ship waves
    - H. Liang & X. Chen

#### JFM Perspectives (online only)

- P1 The reciprocal theorem in fluid dynamics and transport phenomena
  - H. Masoud & H. A. Stone

#### JFM Rapids (online only)

- R1 Kelvin–Helmholtz billows above Richardson number 1/4
  - J. P. Parker, C. P. Caulfield & R. R. Kerswell

S indicates supplementary data or movies available online.

- S 775 Liquid jet primary breakup in a turbulent cross-airflow at low Weber number
  - M. Broumand, M. Birouk & S. V. Mahmoodi J.
  - 793 Force balance in convectively driven dynamos with no inertia
    - D. W. Hughes & F. Cattaneo
- S 808 Filament mechanics in a half-space via regularised Stokeslet segments
  - B. J. Walker, K. Ishimoto, H. Gadêlha & E. A. Gaffney

#### **Journal of Fluid Mechanics**

- 1 Koopman mode expansions between simple invariant solutions
  - J. Page & R. R. Kerswell
- 28 Fast equilibration dynamics of viscous particle-laden flow in an inclined channel
  - J. Wong, M. Lindstrom & A. L. Bertozzi
- 54 D'Yakov-Kontorovich instability in planar reactive shocks
  - C. Huete & M. Vera
- 85 Propagation speed of inertial waves in cylindrical swirling flows
  - A. Albayrak, M. Juniper & W. Polifke
- 121 The hydrodynamic lift of a slender, neutrally buoyant fibre in a wall-bounded shear flow at small Reynolds number
  - J. Dhanasekaran & D. L. Koch
- 147 On the origin of the drag force on dimpled spheres
  - N. Beratlis, E. Balaras & K. Squires
- 168 Experimental study of particle trajectories below deep-water surface gravity wave groups
  - T. S. van den Bremer, C. Whittaker, R. Calvert, A. Raby & P. H. Taylor
- 187 Behaviour of small-scale turbulence in the turbulent/non-turbulent interface region of developing turbulent jets
  - M. Breda & O. R. H. Buxton
- 217 Data-driven prediction of unsteady flow over a circular cylinder using deep learning S. Lee & D. You
- 255 Scale interactions in turbulent rotating planar Couette flow: insight through the Reynolds stress transport
  - T. Kawata & P. H. Alfredsson
- 296 Experimental study of the nonlinear saturation of the elliptical instability: inertial wave turbulence versus geostrophic
  - T. Le Reun, B. Favier & M. Le Bars

Contents continued on inside back cover.

- 327 Thermodynamically consistent modelling of two-phase flows with moving contact line and soluble surfactants
  - G. Zhu, J. Kou, B. Yao, Y.-s. Wu, J. Yao &
- 360 Comprehensive shear stress analysis of turbulent boundary layer profiles
  - K. M. Womack, C. Meneveau & M. P. Schultz
- 390 Forced synchronization of quasiperiodic oscillations in a thermoacoustic system Y. Guan, V. Gupta, M. P. Wan & L. K. B. Li
- 422 Faraday instability of a liquid layer on a lubrication film
  - S. Zhao, M. Dietzel & S. Hardt
- 448 Richtmyer–Meshkov instability of an unperturbed interface subjected to a diffracted convergent shock L. Zou, M. Al-Marouf, W. Cheng,
  - R. Samtaney, J. Ding & X. Luo
- S 468 The controlled vertical impact of an inclined flat plate on a quiescent water surface
  - A. Wang & J. H. Duncan
  - 512 Langmuir turbulence and filament frontogenesis in the oceanic surface boundary layer P. P. Sullivan & J. C. McWilliams
  - 554 Model for the dynamics of micro-bubbles in high-Reynolds-number flows
    - Z. Zhang, D. Legendre & R. Zamansky
- S 579 Laminar-turbulent coexistence in annular Couette flow
  - K. Kunii, T. Ishida, Y. Duguet & T. Tsukahara
  - 604 Shoaling mode-2 internal solitary-like waves M. Carr, M. Stastna, P. A. Davies & K. J. van de Wal
  - 633 Direct simulation Monte Carlo computations and experiments on leading-edge separation in rarefied hypersonic flow
    - R. Prakash, L. M. Le Page, L. P. McQuellin, S. L. Gai & S. O'Byrne



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





