https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

The new home of
Cambridge Journals

cambridge.org/core

Cambridge **Core**

CAMBRIDGE
UNIVERSITY PRESS

https://doi.org/10.1017/jfm.2017.269 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

CAMBRIDGE UNIVERSITY PRESS

https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

S 621 A computational model of the flight dynamics and aerodynamics of a jellyfish-like flying machine
F. Fang, K. L. Ho, L. Ristroph & M. J. Shelley

656 Analytical analysis of gas diffusion into non-circular pores of shale organic matter
M. Mehrabi, F. Javadpour & K. Sepehrnoori

JFM Rapids (online only)

R1 Solvo-osmotic flow in electrolytic mixtures
S. Samin & R. van Roij

S indicates supplementary data or movies available online.

678 Swirling flow states in finite-length diverging or contracting circular pipes
Z. Rusak, Y. Zhang, H. Lee & S. Wang

713 Resonance-like dynamics in radial cyclic injection flows of immiscible fluids in homogeneous porous media
T. F. Lins & J. Azaiez

https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

819

ISSN 0022-1120

Journal of Fluid Mechanics

25 May 2017

1 Growth dynamics of turbulent spots in plane Couette flow
M. Couliou & R. Monchaux

S 21 Quantitative predictions of cavitation presence and erosion-prone locations in a high-pressure cavitation test rig
P. Koukouvinis, N. Mitroglou, M. Gavaises, M. Lorenzi & M. Santini

58 Direct numerical simulation of scalar transport in turbulent flows over progressive surface waves
D. Yang & L. Shen

S 104 Dispersion of solute released from a sphere flowing in a microchannel
S. Gekle

121 Reopening modes of a collapsed elasto-rigid channel
L. Ducloué, A. L. Hazel, A. B. Thompson & A. Juel

147 Towards a quantitative comparison between global and local stability analysis
L. Siconolfi, V. Citro, F. Giannetti, S. Camarri & P. Luchini

S 165 Signature of large-scale motions on turbulent/non-turbulent interface in boundary layers
J. Lee, H. J. Sung & T. A. Zaki

188 Direct particle–fluid simulation of Kolmogorov-length-scale size particles in decaying isotropic turbulence
L. Schneiders, M. Meinke & W. Schröder

228 Theoretical model of acoustic scattering from a flat plate with serrations
X. Huang

258 Transient lift force on a blade during cutting of a vortex with non-zero axial flow
D. C. Saunders & J. S. Marshall

285 Streaming patterns in Faraday waves
N. Périnet, P. Gutiérrez, H. Urra, N. Mujica & L. Gordillo

311 Yield limit analysis of particle motion in a yield-stress fluid
E. Chaparian & I. A. Frigaard

352 Spiralling liquid jets: verifiable mathematical framework, trajectories and peristaltic waves
Y. D. Shikhmurzaev & G. M. Sisoev

401 Hydrodynamics of a droplet passing through a microfluidic T-junction
Y. Chen & Z. Deng

435 Theory and application of reverberated direct and indirect noise
E. O. Rolland, F. De Domenico & S. Hochgreb

465 Pulsed jets driven by two interacting cavitation bubbles produced at different times
Y. Tomita & K. Sato

494 Subfilter-scale enrichment of planetary boundary layer large eddy simulation using discrete Fourier–Gabor modes
A. S. Ghate & S. K. Lele

540 Inertial migration of spherical and oblate particles in straight ducts
I. Lashgari, M. N. Ardekani, I. Banerjee, A. Russom & L. Brandt

562 Thermocapillary modulation of self-rewetting films
W. Batson, Y. Agnon & A. Oron

592 Destabilisation and modification of Tollmien–Schlichting disturbances by a three-dimensional surface indentation
H. Xu, S. M. Mughal, E. R. Gowree, C. J. Atkin & S. J. Sherwin

Contents continued on inside back cover.

https://doi.org/10.1017/jfm.2017.269 Published online by Cambridge University Press

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

FSC www.fsc.org MIX Paper from responsible sources FSC® C007785

CAMBRIDGE UNIVERSITY PRESS