- 395 Transition of transient channel flow after a change in Reynolds numberS. He & M. Seddighi
- 428 Free radially expanding liquid sheet in air: time- and space-resolved measurement of the thickness field
  C. Vernay, L. Ramos & C. Ligoure
- 445 The asymptotics of the moving contact line: cracking an old nutD. N. Sibley, A. Nold & S. Kalliadasis
- 463 Turbulent channel flow of dense suspensions of neutrally buoyant spheresF. Picano, W.-P. Breugem & L. Brandt

## JFM Rapids (online only)

- S R1 Drop impact into a deep pool: vortex shedding and jet formation
  G. Agbaglah, M.-J. Thoraval, S. T. Thoroddsen, L. V. Zhang, K. Fezzaa & R. D. Deegan
  - R2 Boundary layer stabilization using free-stream vortices
    L. Siconolfi, S. Camarri & J. H. M. Fransson

S indicates supplementary data or movies available online.

- 488 Electrohydrodynamic instability of miscible core–annular flows with electrical conductivity stratificationZ. Ding & T. N. Wong
- S 513 The propagation of gravity currents in a circular cross-section channel: experiments and theory
  S. Longo, M. Ungarish, V. Di Federico,
  L. Chiapponi & A. Maranzoni
- S 538 Two-frequency excitation of single-mode Faraday wavesW. Batson, F. Zoueshtiagh & R. Narayanan
  - 572 Minimal-energy perturbations rapidly approaching the edge state in Couette flowS. Cherubini & P. De Palma
- S R3 The Graetz–Nusselt problem extended to continuum flows with finite slip
  A. S. Haase, S. J. Chapman,
  P. A. Tsai, D. Lohse &
  R. G. H. Lammertink

ISSN 0022-1120

## Journal of Fluid Mechanics

 S 1 Challenging the large eddy simulation technique with advanced *a posteriori* tests
 E. Bou-Zeid

64

## 5 The motion of a 2D pendulum in a channel subjected to an incoming flowA. Fani & F. Gallaire

- 26 A multilayer ice-flow model generalising the shallow shelf approximation **G. Jouvet**
- 52 Stirring and scalar transfer by grid-generated turbulence in the presence of a mean scalar gradient
  S. Laizet & J. C. Vassilicos
- 76 Thin-film flow in helically-wound rectangular channels of arbitrary torsion and curvatureD. J. Arnold, Y. M. Stokes & J. E. F. Green
- 95 Air-assisted atomization of liquid jets in varying levels of turbulence
  A. Kourmatzis & A. R. Masri
- 133 High-frequency viscosity of a dilute suspension of elongated particles in a linear shear flow between two walls
  F. Feuillebois, M. L. Ekiel-Jeżewska,
  E. Wajnryb, A. Sellier & J. Bławzdziewicz
- S 148 Flows produced by the combined oscillatory rotation and translation of a circular cylinder in a quiescent fluid
   C. Koehler, P. Beran, M. Vanella & E. Balaras
  - 171 Long-range wall perturbations in dense granular flows
    P. G. Rognon, T. Miller, B. Metzger & I. Einav

Contents continued on inside back cover.

- 193 The linear stability of a Stokes layer subjected to high-frequency perturbations
  Christian Thomas, P. J. Blennerhassett,
  A. P. Bassom & Christopher Davies
- 219 A scaling analysis of transient natural convection in a reservoir model induced by iso-flux heating Peng Yu, J. C. Patterson & C. Lei
- 250 Spatio-temporal structure of the 'fully developed' transitional flow in a symmetric wavy channel. Linear and weakly nonlinear stability analysis
  S. Blancher, Y. Le Guer & K. El Omari
- 277 An example where lubrication theory comes short: hydraulic jumps in a flow down an inclined plateE. S. Benilov & V. N. Lapin
- 296 Rock dissolution patterns and geochemical shutdown of CO<sub>2</sub>-brine-carbonate reactions during convective mixing in porous media
  X. Fu, L. Cueto-Felgueroso, D. Bolster & R. Juanes
- 316 Thermomagnetic convection in a layer of ferrofluid placed in a uniform oblique external magnetic field
  H. Rahman & S. A. Suslov
- 349 Vertical natural convection: application of the unifying theory of thermal convectionC. S. Ng, A. Ooi, D. Lohse & D. Chung
- 362 Direct numerical simulation of a turbulent jet impinging on a heated wall
  T. Dairay, V. Fortuné, E. Lamballais & L.-E. Brizzi

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



MIX Paper from responsible sources FSC® C007785

