

VOLUME 514

10 September 2004

Journal of Fluid Mechanics



CAMBRIDGE
UNIVERSITY PRESS

N. J. Balmforth & S. Mandre	Dynamics of roll waves	1
F. Bouchut, J. Le Sommer & V. Zeitlin	Frontal geostrophic adjustment and nonlinear wave phenomena in one-dimensional rotating shallow water. Part 2. High-resolution numerical simulations	35
D. Greenblatt & E. A. Moss	Rapid temporal acceleration of turbulent pipe flow	65
M. F. M. Speetjens H. J. H. Clercx & G. J. F. van Heijst	A numerical and experimental study on advection in three-dimensional Stokes flows	77
T. Ross, C. Garrett & R. Lueck	On the turbulent co-spectrum of two scalars and its effect on acoustic scattering from oceanic turbulence	107
S. Braun & A. Kluwick	Unsteady three-dimensional marginal separation caused by surface-mounted obstacles and/or local suction	121
B. Knaepen, O. Debliquy & D. Carati	Direct numerical simulation and large-eddy simulation of a shear-free mixing layer	153
D. Jung, S. Gamard & W. K. George	Downstream evolution of the most energetic modes in a turbulent axisymmetric jet at high Reynolds number. Part 1. The near-field region	173
S. Gamard, D. Jung & W. K. George	Downstream evolution of the most energetic modes in a turbulent axisymmetric jet at high Reynolds number. Part 2. The far-field region	205
C. Pantano	Direct simulation of non-premixed flame extinction in a methane-air jet with reduced chemistry	231
Y. Dubief, C. M. White, V. E. Terrapon, E. S. G. Shaqfeh, P. Moin & S. K. Lele	On the coherent drag-reducing and turbulence-enhancing behaviour of polymers in wall flows	271
H. K. Cheng & C. J. Lee	Sonic-boom noise penetration under a wavy ocean: theory	281
M. A. Kelmanson	Hypersingular boundary integrals in cusped two-dimensional free-surface Stokes flow	313
B. R. Sutherland, P. J. Kyba & M. R. Flynn	Intrusive gravity currents in two-layer fluids	327
M. R. Flynn & B. R. Sutherland	Intrusive gravity currents and internal gravity wave generation in stratified fluid	355
P. W. Duck, R. E. Hewitt & M. R. Foster	On the spatial development of dusty wall jet	385
INDEX TO VOLUME 514		412
SCHEDULE OF INTERNATIONAL CONFERENCES ON FLUID MECHANICS		414

