

INDEX

- Achatz, U., Klein, R. & Senf, F.** Gravity waves, scale asymptotics and the pseudo-incompressible equations, 120–147
- Afkhami, S., Tyler, A. J., Renardy, Y., Renardy, M., St. Pierre, T. G., Woodward, R. C. & Riffle, J. S.** Deformation of a hydrophobic ferrofluid droplet suspended in a viscous medium under uniform magnetic fields, 358–384
- Armanini, A.** *See* Ferrari, Fraccarollo, Dumbser, Toro & Armanini
- Arnold, C. B.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Arora, M.** *See* Webb, Arora, Roy, Payne & Coussios
- Bailey, S. C. C., Kunkel, G. J., Hultmark, M., Vallikivi, M., Hill, J. P., Meyer, K. A., Tsay, C., Arnold, C. B. & Smits, A. J.** Turbulence measurements using a nanoscale thermal anemometry probe, 160–179
- Bailly, C.** *See* Bogey & Bailly
- Benilov, E. S., Chapman, S. J., McLeod, J. B., Ockendon, J. R. & Zubkov, V. S.** On liquid films on an inclined plate, 53–69
- Bogey, C. & Bailly, C.** Influence of nozzle-exit boundary-layer conditions on the flow and acoustic fields of initially laminar jets, 507–538
- Caulfield, C. P.** *See* Woods, Caulfield, Landel & Kuesters
- Chang, C. C.** *See* Hsieh, Kung, Chang & Chu
- Chapman, S. J.** *See* Benilov, Chapman, McLeod, Ockendon & Zubkov
- Chu, C.-C.** *See* Hsieh, Kung, Chang & Chu
- Coussios, C.-C.** *See* Webb, Arora, Roy, Payne & Coussios
- Davidson, P. A.** On the decay of Saffman turbulence subject to rotation, stratification or an imposed magnetic field, 268–292
- Davies, C.** *See* Thomas & Davies
- Dewar, W. K.** *See* Ward & Dewar
- Duguet, Y., Willis, A. P. & Kerswell, R. R.** Slug genesis in cylindrical pipe flow, 180–208
- Dumbser, M.** *See* Ferrari, Fraccarollo, Dumbser, Toro & Armanini
- Ferrari, A., Fraccarollo, L., Dumbser, M., Toro, E. F. & Armanini, A.** Three-dimensional flow evolution after a dam break, 456–477
- Ffowcs Williams, J. E.** David Crighton FRS, 18–21
- Fraccarollo, L.** *See* Ferrari, Fraccarollo, Dumbser, Toro & Armanini
- Gekle, S.** *See* Gordillo & Gekle
- Gekle, S. & Gordillo, J. M.** Generation and breakup of Worthington jets after cavity collapse.
Part 1. Jet formation, 293–330
- Gordillo, J. M.** *See* Gekle & Gordillo
- Gordillo, J. M. & Gekle, S.** Generation and breakup of Worthington jets after cavity collapse.
Part 2. Tip breakup of stretched jets, 331–346
- Healey, J. J.** Model for unstable global modes in the rotating-disk boundary layer, 148–159
- Hill, J. P.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Hinch, J.** A perspective of Batchelor's research in micro-hydrodynamics, 8–17
- Hsieh, C.-T., Kung, C.-F., Chang, C. C. & Chu, C.-C.** Unsteady aerodynamics of dragonfly using a simple wing–wing model from the perspective of a force decomposition, 233–252

- Hultmark, M.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Ivey, G. N.** *See* Lim, Ivey & Jones
- Jones, N. L.** *See* Lim, Ivey & Jones
- Jovanović, M. R.** *See* Lieu, Moarref & Jovanović
 See also Moarref & Jovanović
- Kerswell, R. R.** *See* Duguet, Willis & Kerswell
- Klein, R.** *See* Achatz, Klein & Senf
- Kuesters, A.** *See* Woods, Caulfield, Landel & Kuesters
- Kung, C.-F.** *See* Hsieh, Kung, Chang & Chu
- Kunkel, G. J.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Landel, J. R.** *See* Woods, Caulfield, Landel & Kuesters
- Li, F., Qi, H. & You, C.** Phase Doppler anemometry measurements and analysis of turbulence modulation in dilute gas–solid two-phase shear flows, 434–455
- Lieu, B. K., Moarref, R. & Jovanović, M. R.** Controlling the onset of turbulence by streamwise travelling waves. Part 2. Direct numerical simulation, 100–119
- Lim, K., Ivey, G. N. & Jones, N. L.** Experiments on the generation of internal waves over continental shelf topography, 385–400
- McLeod, J. B.** *See* Benilov, Chapman, McLeod, Ockendon & Zubkov
- Meyer, K. A.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Moarref, R.** *See* Lieu, Moarref & Jovanović
- Moarref, R. & Jovanović, M. R.** Controlling the onset of turbulence by streamwise travelling waves. Part 1. Receptivity analysis, 70–99
- Moffatt, H. K.** George Batchelor: a personal tribute, ten years on, 2–7
- Moreau, S.** *See* Posson, Roger & Moreau
- Ockendon, J. R.** *See* Benilov, Chapman, McLeod, Ockendon & Zubkov
- Payne, S. J.** *See* Webb, Arora, Roy, Payne & Coussios
- Posson, H., Roger, M. & Moreau, S.** On a uniformly valid analytical rectilinear cascade response function, 22–52
- Qi, H.** *See* Li, Qi & You
- Renardy, M.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Renardy, Y.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Riffle, J. S.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Roger, M.** *See* Posson, Roger & Moreau
- Roy, R. A.** *See* Webb, Arora, Roy, Payne & Coussios
- Senf, F.** *See* Achatz, Klein & Senf
- Smits, A. J.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- St. Pierre, T. G.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Thomas, C. & Davies, C.** The effects of mass transfer on the global stability of the rotating-disk boundary layer, 401–433
- Toro, E. F.** *See* Ferrari, Fraccarollo, Dumbser, Toro & Armanini
- Tsay, C.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Tyler, A. J.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Vallikivi, M.** *See* Bailey, Kunkel, Hultmark, Vallikivi, Hill, Meyer, Tsay, Arnold & Smits
- Vennell, R.** Tuning turbines in a tidal channel, 253–267

- Ward, M. L. & Dewar, W. K.** Scattering of gravity waves by potential vorticity in a shallow-water fluid, 478–506
- Webb, I. R., Arora, M., Roy, R. A., Payne, S. J. & Coussios, C.-C.** Dynamics of gas bubbles in time-variant temperature fields, 209–232
- Willis, A. P.** *See* Duguet, Willis & Kerswell
- Woods, A. W., Caulfield, C. P., Landel, J. R. & Kuesters, A.** Non-invasive turbulent mixing across a density interface in a turbulent Taylor–Couette flow, 347–357
- Woodward, R. C.** *See* Afkhami, Tyler, Renardy, Renardy, St. Pierre, Woodward & Riffle
- Worster, G.** George Batchelor and David Crighton: a celebration of their lives and work, 1
- You, C.** *See* Li, Qi & You
- Zubkov, V. S.** *See* Benilov, Chapman, McLeod, Ockendon & Zubkov

BATCHELOR AND CRIGHTON COMMEMORATIVE TALKS

- 1 George Batchelor and David Crighton: a celebration of their lives and work
M. G. Worster
- 2 George Batchelor: a personal tribute, ten years on
H. K. Moffatt
- 8 A perspective of Batchelor's research in micro-hydrodynamics
E. J. Hinch
- 18 David Crighton FRS
J. E. Ffowcs Williams

PAPERS

- 22 On a uniformly valid analytical rectilinear cascade response function
H. Posson, M. Roger & S. Moreau
- 53 On liquid films on an inclined plate
E. S. Benilov, S. J. Chapman, J. B. McLeod, J. R. Ockendon & V. S. Zubkov
- 70 Controlling the onset of turbulence by streamwise travelling waves. Part 1. Receptivity analysis
R. Moarref & M. R. Jovanović
- 100 Controlling the onset of turbulence by streamwise travelling waves. Part 2. Direct numerical simulation
B. K. Lieu, R. Moarref & M. R. Jovanović
- 120 Gravity waves, scale asymptotics and the pseudo-incompressible equations
U. Achatz, R. Klein & F. Senf
- 148 Model for unstable global modes in the rotating-disk boundary layer
J. J. Healey
- 160 Turbulence measurements using a nanoscale thermal anemometry probe
S. C. C. Bailey, G. J. Kunkel, M. Hultmark, M. Vallikivi, J. P. Hill, K. A. Meyer, C. Tsay, C. B. Arnold & A. J. Smits
- S 180 Slug genesis in cylindrical pipe flow
Y. Duguet, A. P. Willis & R. R. Kerswell
- 209 Dynamics of gas bubbles in time-variant temperature fields
I. R. Webb, M. Arora, R. A. Roy, S. J. Payne & C.-C. Coussios
- 233 Unsteady aerodynamics of dragonfly using a simple wing–wing model from the perspective of a force decomposition
C.-T. Hsieh, C.-F. Kung, C. C. Chang & C.-C. Chu
- 253 Tuning turbines in a tidal channel
R. Vennell
- 268 On the decay of Saffman turbulence subject to rotation, stratification or an imposed magnetic field
P. A. Davidson
- 293 Generation and breakup of Worthington jets after cavity collapse. Part 1. Jet formation
S. Gekle & J. M. Gordillo
- 331 Generation and breakup of Worthington jets after cavity collapse. Part 2. Tip breakup of stretched jets
J. M. Gordillo & S. Gekle
- 347 Non-invasive turbulent mixing across a density interface in a turbulent Taylor–Couette flow
A. W. Woods, C. P. Caulfield, J. R. Landel & A. Kuesters
- 358 Deformation of a hydrophobic ferrofluid droplet suspended in a viscous medium under uniform magnetic fields
S. Afkhami, A. J. Tyler, Y. Renardy, M. Renardy, T. G. St. Pierre, R. C. Woodward & J. S. Riffle
- 385 Experiments on the generation of internal waves over continental shelf topography
K. Lim, G. N. Ivey & N. L. Jones
- 401 The effects of mass transfer on the global stability of the rotating-disk boundary layer
C. Thomas & C. Davies
- 434 Phase Doppler anemometry measurements and analysis of turbulence modulation in dilute gas–solid two-phase shear flows
F. Li, H. Qi & C. You
- 456 Three-dimensional flow evolution after a dam break
A. Ferrari, L. Fraccarollo, M. Dumbser, E. F. Toro & A. Armanini
- 478 Scattering of gravity waves by potential vorticity in a shallow-water fluid
M. L. Ward & W. K. Dewar
- S 507 Influence of nozzle-exit boundary-layer conditions on the flow and acoustic fields of initially laminar jets
C. Bogey & C. Bailly
- 540 INDEX TO VOLUME 663

S indicates supplementary data or movies available online.