INDEX

Armfield, S. W. See Williamson, Armfield & Lin

Bailon-Cuba, J., Emran, M. S. & Schumacher, J. Aspect ratio dependence of heat transfer and large-scale flow in turbulent convection, 152–173

Beekman, I. See Duan, Beekman & Martin

Biswas, G. See Ray, Biswas & Sharma

Booth, R. J. S. On the growth of the mixing zone in miscible viscous fingering, 527-539

Campbell, A. N. & Cardoso, S. S. S. Turbulent plumes with internal generation of buoyancy by chemical reaction, 122–151

Cardoso, S. S. S. See Campbell & Cardoso

Choi, W. See Tian, Perlin & Choi

Christensen, K. T. See Wu & Christensen

Cliffe, K. A. See Garratt, Cliffe, Hibberd & Power

Cohen, J. See Philip & Cohen

Dahle, H. K. See Joekar-Niasar, Hassanizadeh & Dahle

Duan, L., Beekman, I. & Martín, M. P. Direct numerical simulation of hypersonic turbulent boundary layers. Part 2. Effect of wall temperature, 419–445

Dymkou, V. See Pothérat & Dymkou

Dyson, R. J. & Jensen, O. E. A fibre-reinforced fluid model of anisotropic plant cell growth, 472–503

Emran, M. S. See Bailon-Cuba, Emran & Schumacher

Garratt, J. E., Cliffe, K. A., Hibberd, S. & Power, H. A compressible flow model for the air-rotor-stator dynamics of a high-speed, squeeze-film thrust bearing, 446–471

Griffith, M. D., Thompson, M. C., Leweke, T. & Hourigan, K. Convective instability in steady stenotic flow: optimal transient growth and experimental observation, 504–514

Hassanizadeh, S. M. See Joekar-Niasar, Hassanizadeh & Dahle

Hibberd, S. See Garratt, Cliffe, Hibberd & Power

Hourigan, K. See Griffith, Thompson, Leweke & Hourigan

Jensen, O. E. See Dyson & Jensen

Ji, H. See Suzuki, Ji & Yamamoto

Joekar-Niasar, V., Hassanizadeh, S. M. & Dahle, H. K. Non-equilibrium effects in capillarity and interfacial area in two-phase flow: dynamic pore-network modelling, 38–71

Leweke, T. See Griffith, Thompson, Leweke & Hourigan

Lin, W. See Williamson, Armfield & Lin

Magyari, E. Translation groups of the boundary-layer flows induced by continuous moving surfaces, 327–343

Marston, J. O., Yong, W. & Thoroddsen, S. T. Direct verification of the lubrication force on a sphere travelling through a viscous film upon approach to a solid wall, 515–526

Martín, M. P. See Duan, Beekman & Martín

Moin, P. See Wu & Moin

Pedrizzetti, G. Vortex formation out of two-dimensional orifices, 198-216

Perlin, M. See Tian, Perlin & Choi

Index 541

- Philip, J. & Cohen, J. Formation and decay of coherent structures in pipe flow, 258–279
- Pothérat, A. & Dymkou, V. Direct numerical simulations of low-Rm MHD turbulence based on the least dissipative modes, 174-197
- Power, H. See Garratt, Cliffe, Hibberd & Power
- Ray, B., Biswas, G. & Sharma, A. Generation of secondary droplets in coalescence of a drop at a liquid-liquid interface, 72-104
- Rodríguez, D. & Theofilis, V. Structural changes of laminar separation bubbles induced by global linear instability, 280–305
- Schumacher, J. See Bailon-Cuba, Emran & Schumacher
- Sharma, A. See Ray, Biswas & Sharma
- Suzuki, T., Ji, H. & Yamamoto, F. Instability waves in a low-Reynolds-number planar iet investigated with hybrid simulation combining particle tracking velocimetry and direct numerical simulation, 344-379
- Theofilis, V. See Rodríguez & Theofilis
- Thompson, M. C. See Griffith, Thompson, Leweke & Hourigan
- Thoroddsen, S. T. See Marston, Yong & Thoroddsen
- Tian, Z., Perlin, M. & Choi, W. Energy dissipation in two-dimensional unsteady plunging breakers and an eddy viscosity model, 217-257
- Williamson, N., Armfield, S. W. & Lin, W. Transition behaviour of weak turbulent fountains, 306-326
- Wu, X. & Moin, P. Large-activation-energy theory for premixed combustion under the influence of enthalpy fluctuations, 3-37
- Wu, Y. & Christensen, K. T. Spatial structure of a turbulent boundary layer with irregular surface roughness, 380-418
- Yamamoto, F. See Suzuki, Ji & Yamamoto
- Yariv, E. Migration of ion-exchange particles driven by a uniform electric field, 105-121
- Yong, W. See Marston, Yong & Thoroddsen

https://doi.org/10.1017/S0022112010003022 Published online by Cambridge University Press

Fantastic New Titles from Cambridge!

NIST Handbook of Mathematical Functions

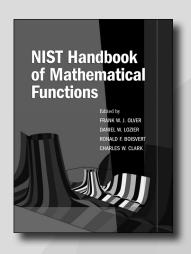
Edited by

FRANK W. J. OLVER, DANIEL W. LOZIER, RONALD F. BOISVERT, and CHARLES W. CLARK

This handbook results from a 10-year project conducted by the National Institute of Standards and Technology with an international group of expert authors and validators. Printed in full color, it is destined to replace its predecessor, the classic but long-outdated Handbook of Mathematical Functions, edited by Abramowitz and Stegun. Included with every copy is a CD with a searchable PDF of each chapter.

\$99.00: Hardback: 978-0-521-19225-5: 966 pp.

\$50.00: Paperback: 978-0-521-14063-8



Acta Numerica 2010

Nineteenth Edition

Edited by ARIEH ISERLES

Acta Numerica

\$135.00: Hardback: 978-0-521-19284-2: 604 pp.

A Practical Guide to the Invariant Calculus

ELIZABETH LOUISE MANSFIELD

Cambridge Monographs on Applied and Computational Mathematics

\$75.00: Hardback: 978-0-521-85701-7: 260 pp.

Forthcoming...

Gravity-Capillary Free-Surface Flows

JEAN-MARC VANDEN-BROECK

Cambridge Monographs on Mechanics \$110.00: Hardback: 978-0-521-81190-3: 325 pp.



Prices subject to change.

www.cambridge.org/us/mathematics 800.872.7423



https://doi.org/10.1017/S0022112010003022 Published online by Cambridge University Press

Journal of Fluid Mechanics

- Professor Isaac Goldhirsch Obituary
- Large-activation-energy theory for premixed combustion under the influence of enthalpy fluctuations X. Wu & P. Moin
- Non-equilibrium effects in capillarity and interfacial area in two-phase flow: dynamic pore-network modelling V. Joekar-Niasar, S. M. Hassanizadeh & H. K. Dahle
- Generation of secondary droplets in coalescence of a drop at a liquid-liquid interface B. Ray, G. Biswas & A. Sharma
- Migration of ion-exchange particles driven by a uniform electric field E. Yariv
- 122 Turbulent plumes with internal generation of buoyancy by chemical reaction A. N. Campbell & S. S. S. Cardoso
- Aspect ratio dependence of heat transfer and large-scale flow in turbulent convection J. Bailon-Cuba, M. S. Emran & J. Schumacher
- 174 Direct numerical simulations of low-Rm MHD turbulence based on the least dissipative modes A. Pothérat & V. Dymkou
- Vortex formation out of two-dimensional orifices G. Pedrizzetti
- 217 Energy dissipation in two-dimensional unsteady plunging breakers and an eddy viscosity model Z. Tian, M. Perlin & W. Choi
- Formation and decay of coherent structures in pipe flow 258
- J. Philip & J. Cohen
- Structural changes of laminar separation bubbles induced by global linear instability D. Rodríguez & V. Theofilis
- S 306 Transition behaviour of weak turbulent fountains
 - N. Williamson, S. W. Armfield & W. Lin
 - Translation groups of the boundary-layer flows induced by continuous moving surfaces E. Magyari
 - 344 Instability waves in a low-Reynolds-number planar jet investigated with hybrid simulation combining particle tracking velocimetry and direct numerical simulation T. Suzuki, H. Ji & F. Yamamoto
 - Spatial structure of a turbulent boundary layer with irregular surface roughness Y. Wu & K. T. Christensen
 - Direct numerical simulation of hypersonic turbulent boundary layers. Part 2. Effect of wall temperature L. Duan, I. Beekman & M. P. Martín
 - A compressible flow model for the air-rotor-stator dynamics of a high-speed, squeeze-film thrust bearing J. E. Garratt, K. A. Cliffe, S. Hibberd & H. Power
 - A fibre-reinforced fluid model of anisotropic plant cell growth 472
 - R. J. Dyson & O. E. Jensen
- Convective instability in steady stenotic flow: optimal transient growth and experimental observation M. D. Griffith, M. C. Thompson, T. Leweke & K. Hourigan
- Direct verification of the lubrication force on a sphere travelling through a viscous film upon approach 515 to a solid wall
 - J. O. Marston, W. Yong & S. T. Thoroddsen
- 527 On the growth of the mixing zone in miscible viscous fingering R. J. S. Booth
- 540 Index to Volume 655

S indicates supplementary data or movies available online.



Product group from well-managed forests and other controlled sources

Cert no. SA-COC-1527 www.fsc.org © 1996 Forest Stewardship Council

