

Keyword index to volume 25

- Added mass, 74
ADM, 549
Aerothermodynamics, 933, 945
Air-lift pump, 996
Angular heat flux distribution, 305
Annular flow, 58
Automated code generation, 451
Automated high speed video analysis, 149
Backward-facing step, 581, 711
Binary mixtures, 140
Bluff bodies, 537
Bluff body, 1
Bluff-body interference, 364
Boiling, 74, 128, 262, 274
Boiling curve, 841
Boiling hysteresis, 81
Boiling mechanism, 223, 243
Bond number, 313
Bubble, 489
Bubble behaviour, 149
Bubble dynamics, 180
Bubble formation, 288
Bubble growth, 74, 196
Bubble life cycle, 149
Bubbly pipe flow, 481
Cap-turbulent flow, 44
Capillary jet, 91
Centrifugal force, 759
CFD, 649, 1047
Channel flow, 373, 618, 961, 1015
Characteristics-based scheme, 1015
CHF, 223, 243
Choked flow, 58
Churn-turbulent flow, 44
Circular cylinder, 537, 741
Cluster, 721
Co-flow, 625
Coherent fine scale eddy, 331
Coherent structure, 331, 471
Coherent structures, 864
Coherent vortices, 461
Computational fluid dynamics, 1015
Computational prediction, 606
Concave wall turbulence, 513
Conductivity probe, 44
Confined boiling, 313
Contact angle, 74, 320
Control, 341
Control theory, 341
Convective flows, 671
Converging channels, 671
Corner flow, 975
Critical condition, 996
Cross gradients of temperature and concentration, 1034
Cross-flow cooling, 636
CTAC surfactant solution, 961
Curvature, 569
Curved surfaces, 499
Czochralski crystal growth configuration, 431
3D separation, 513
Darcy, 115
Deconvolution, 549
DES, 513
Differentially heated cavity, 824
Diffuser, 1
Direct numerical simulation, 331, 341, 393, 404, 431, 461, 618, 721, 749
Dispersed two-phase flow, 489
DNS, 471, 961
DNS and LES approaches, 824
Drag reduction, 341, 618
Drag-reduction, 961
Dry patch, 223, 243
Dryout, 274
DSMC, 975
Dynamic surface tension, 91
Dynamical systems, 351
EARSIM, 451
Ebullition, 274
Eddy viscosity, 489, 785
Electromagnetic actuator, 711
Elliptic relaxation, 1047
Elliptical tube array, 636
End effects, 537
Environmentally acceptable, 841
Euler–Lagrange, 74
Euler–Lagrange model, 180
Evaporation, 128
Evaporation curve, 320
Experimental, 364
Experimental data validation, 864
Experimental investigation, 824
Explicit algebraic Reynolds stress model, 451
Film boiling, 209
Filter-based model, 10
Fin-tube heat exchanger, 1006
Finite-volume, 115
Finned surfaces, 22
Flow separation and reattachment, 711
Force-coupling method, 180
Forced convection, 636, 741
Forschheimer, 115
Fuse, 115
Gas flow, 975
Gas–water–solid particles three-phase mixture, 996

- Giesekus model, 961
- Grooved channel, 22
- Ground effect, 1
- Heat and mass transfer, 1034
- Heat transfer, 81, 103, 115, 140, 196, 313, 569, 606, 683, 749, 776, 884, 933, 945
- Heat transfer augmentation, 393
- Heat transfer control, 559, 711
- Heat transfer enhancement, 22, 288, 471, 841
- Heat transfer rate, 1006
- Heater size, 262
- High viscosity, 58
- Higher order moments, 864
- Highly wetting liquid, 81
- Holographic interferometry, 180
- Hybrid modelling, 625
- Immersed boundary method, 461
- Immiscible droplets, 471
- Impingement, 749
- Impinging jet, 759
- Instability, 593
- Instantaneous vorticity fluctuation, 481
- Interfacial area, 44
- Interfacial structures, 44
- Interfacial velocity, 223
- Isopropanol, 243
- Jet, 173
- Jet impingement, 81
- Jet in cross-flow, 767
- Jet noise, 625
- Laminar, 32
- Large eddy simulation, 537, 569, 581, 767
- Large-eddy simulation, 549, 593
- Large-scale structure, 404
- Laser, 683
- LDA, 759
- LDV measurement, 489
- Lift, 74
- Local heat transfer, 180
- Local measurement, 44
- Local pipe bends, 996
- Lubrication, 618
- Magnetic field, 559
- Mass transfer, 683
- Matrix-free dual time stepping scheme, 1015
- MEMS, 975
- Microchannel, 975, 986
- Microchannels, 128
- Microgravity, 262
- Microheater, 262, 274
- Micromixing, 875
- Microthermocouple, 223, 243
- MILES, 625
- Mixing, 173
- Mixing enhancement, 767
- ζ - f model, 1047
- Modelling, 897
- Molecular diffusion, 986
- Molten Sn/Pb solder, 91
- Moving cylinder, 692
- Moving plate, 692
- Multiphase flow, 721
- Multiplicity of solutions, 1034
- Natural convection, 103, 305, 659, 683
- Non-contact seals, 649
- Non-linear eddy-viscosity models, 499
- Non-linear k - ϵ model, 659
- Nonionic surfactant, 841
- Nozzles, 58
- Nucleate boiling, 140, 196, 209, 298, 305, 313
- Nucleation site density, 305
- Nucleation site interactions, 298
- Numerical correlation, 671
- Numerical simulations, 559, 897
- Numerical study, 1034
- Oblique vortex shedding, 461
- Opposing mixed convection, 692
- Optical probe, 223, 243
- Optical studies, 209
- Orifice flow, 975
- Oscillatory flow, 22
- Overall heat transfer coefficient, 1006
- Overset grids, 513
- Oxygen adsorption, 91
- Particle, 489
- Particle image velocity, 351
- Particle-laden turbulence, 721
- Particle rotation, 721
- Partitions, 103
- PDF, 864
- PDF method, 884
- Phase change, 313
- Phase-averaging, 364
- Pipe flow, 489
- PIV, 864
- Plane asymmetric diffuser, 451
- Plane jet, 749
- Pool boiling, 223, 243, 288, 841
- Porous media, 115, 1015
- Precessing vortex core, 528
- Pressure-diffusion, 776
- Probability density functions, 875
- Pump performance, 996
- R-134a, 305
- Rakes of hot wires, 351
- RANS, 10, 1047
- Realizability constraint, 785
- Recirculating flow, 776
- Refrigeration, 32
- Reynolds number, 741
- Reynolds number effects, 444
- Reynolds shear stress, 341
- Reynolds- and Prandtl-number dependence, 404
- Reynolds-stress models, 499
- Rotating flow, 897
- Roughness, 373, 384
- Roughness effects, 444
- Second moment closure, 776
- Separated boundary layer transition, 593
- Separated flow, 451, 741
- Separation, 444, 499
- Separation control, 581
- Sharp 180° bend, 22
- Solder jetting, 91
- Square ribs, 373
- Statistical results, 149
- Steam condensation, 173
- Subcooled flow boiling, 149
- Subcooling, 262
- Subgrid-scale model, 549
- Surface heat-flux fluctuations, 404
- Surface temperature, 223
- Surface wetting, 223

- Swirl, 528, 625
Tandem surface-mounted cubes, 364
Temperature distribution, 103
Temperature fluctuation, 431
Thermal boundary layer, 180
Thermal contact conductance, 1006
Thermal contact resistance, 1006
Thermal convection, 559
Thermal fluctuations, 884
Thermal non-equilibrium, 115
Thermal resistance, 1011
Thermosolutal convection, 1034
Thin films, 140
Thin-film gauge, 933, 945
Time dependent computations, 10
Tip leakage, 933, 945
Transient heat flux, 274
Transition, 32
Transition boiling, 223, 243
Transition to turbulence, 549
Transonic, 933, 945
Transport phenomena, 140
Transverse-rib roughness, 393
Turbine, 606, 933, 945
Turbulence, 341, 364, 373, 384, 393, 559, 569, 618, 749, 776, 897
Turbulence boundary layer, 759
Turbulence energy budget, 481
Turbulence modelling, 499
Turbulence modification, 471, 489
Turbulence production, 173
Turbulence quantities, 103
Turbulence structure, 431
Turbulent boundary layer, 444
Turbulent channel flow, 331
Turbulent flow, 721
Turbulent mixing, 767
Turbulent natural convection, 824
Turbulent reactive flow, 875
Turbulent recirculating flow, 581
Two phase flow, 243
Two-fluid mixing, 986
Two-phase flow, 58, 128
Two-point correlation, 351
U-RANS modelling, 528
Unsteady flow, 528, 581
Unsteady flow and heat transfer, 1015
Unsteady heat transfer, 741
Unsteady RANS, 513, 659
 v^2 - f , 785
Vapor deposition, 683
Velocity distribution, 103
Velocity similarity, 173
Vortex flow, 1
Vortex shedding, 364, 537
Wake, 721
Wall shear stress, 103
Wall turbulence, 331, 884
Wall-jet, 32
Water drop, 320
Wettability, 320
Wetting limit temperature, 320