

Keyword index Vol. 333, 2005

3D Navier–Stokes equations – Čanić S., 867

A

A posteriori error estimation – Heuveline V., 896
Ablation fronts – Clavin P., 379
Abrasion – Mezlini S., 830
Accuracy – Nordström J., 713
Acoustic source modelling – Munz C.-D., 706
Acoustics – Ask J., 660 – Bailly C., 666 – Delorme Ph., 676 – Dumbser M., 683 – Golanski F., 688 – Guéanff R., 694 – Müller B., 699 – Munz C.-D., 706 – Nordström J., 713 – Özdemir H., 719 – Widjaja R., 726
Active control – Rodriguez O., 773
Adaptive meshing – Moreau L., 371 – van Loon R., 856
Added mass – Le Tallec P., 910
ADER approach – Dumbser M., 683
Aeroacoustic sources – Golanski F., 688
Aeroacoustics – Müller B., 699 – Nordström J., 713
Affine – Rekik A., 789
Airfoil – Kourta A., 810
Analytical simulation – Mezlini S., 830
Anisotropy – Gruescu C., 467
Apparent viscosity – Lefebvre A., 923
Arbitrary Lagrangian Eulerian method – Lefebvre A., 923
Asymptotic analysis – Serpilli M., 593

Asymptotic matching – Doulfoukar Z., 499
Asymptotic methods – Grillet L., 493 – Čanić S., 867
Augmented Lagrangian – Le Dissez A., 796

B

B-spline collocation method – Widjaja R., 726
Bernoulli's equation – Kozlov V., 733
Bifurcation – Benallal A., 319
Binary fluid – Piquer E., 179
Biomechanics – Jouve F., 243 – Ohta M., 642
Blasius solution – Ridha A., 768
Blood flow – Čanić S., 867
Boiling two-phase flows – Grégoire O., 459
Bonding – Serpilli M., 593
Bone tissue – Macocco K., 565
Boundary elements – Sellier A., 413
Boundary formulation – Sellier A., 636
Boundary-integral equations – Sellier A., 111
Bounds – He Q.-C., 439
Boussinesq – Pons M., 127 – Pons M., 133
Brinkman model – Srinivasacharya D., 612
Brittle fracture – Lahellec N., 293
Bubble–bubble interactions – Sellier A., 636
Buckling – Jacques N., 804
Buffet – Kourta A., 810
Bulk modulus – He Q.-C., 439
Buoyancy – Sellier A., 111

C

Calculus of Variations – Jaubert A., 550
Capacitive sensor – Fen-Chong T., 425
Cartesian grid method – Verstappen R., 51
Cauchy problem – Andrieux S., 171
Cavitation – Zaïri F., 431
Cavity – Ask J., 660
Cement – Fen-Chong T., 425 – Coussy O., 507 – Sanahuja J., 818
Chaos – Ait Aider A., 197 – Padilla E.L.M., 599
Characteristic-type formulation – Sesterhenn J., 87
CMCs – Pompidou S., 405
Coalescence of cavities – Flandi L., 542
Coherent structures – Druault Ph., 824
Combustion instability – Laverdant A., 29
Composite materials – Suquet P., 219
Compressible fluid – Marušić-Paloka E., 534
Computational acoustics – Bailly C., 666
Computational aeroacoustics – Delorme Ph., 676 – Guéanff R., 694 – Özdemir H., 719 – Widjaja R., 726
Computational fluid dynamics – Padilla E.L.M., 599
Computational fluid mechanics – Gottlieb D., 3 – Shishkina O., 17 – Laverdant A., 29 – Pasquetti R., 39 – Verstappen R., 51 – Krastev K., 59 – Poncet P., 65 – Paccou A., 79

– Sesterhenn J., 87 – Hay A., 103 – Rebeyrotte A., 163 – Miliou A., 211 – Jinnah M.A., 235 – Rouvreau S., 265 – Lacanette D., 343 – Lubin P., 351 – Buscaglia G., 453 – Grégoire O., 459 – Razafindralandy D., 481 – Scolan Y.-M., 487 – Doulfoukar Z., 499 – Münch C., 574 – Hattabi M., 585 – Balarac G., 622 – Kolmychikov V.V., 739 – Le Dissez A., 796 – Papin M., 838 – van Loon R., 856 – Čanić S., 867 – Pan T.-W., 884 – Heuveline V., 896 – Le Tallec P., 910 – Lefebvre A., 923

Computational solid mechanics – Mélé P., 155 – Sab K., 187 – Suquet P., 219 – Jouve F., 243 – Ghergu M., 249 – Nazarov S.A., 305 – Zaïri F., 359 – Magnain B., 419 – Zaïri F., 431 – Griso G., 475 – Grillet L., 493 – Massart T.J., 521 – Serpilli M., 593 – Moreau S., 648 – Borouchaki H., 762

Conductivity – He Q.-C., 439

Cone Indentation – Kermouche G., 389

Constitutive model – Maïolino S., 279

Continuum mechanics – Licht C., 117 – Reikik A., 789 – Bellomo N., 843

Continuum models – Bellomo N., 843

Continuum thermodynamics – Nguyen Q.-S., 139

Control – Fournier G., 273 – Skamnakis D., 628

Convection – Shevtsova V., 311

Correlation – Van Tuan N., 365

Crack deflection criterion – Pompidou S., 405

Cracks – Gruescu C., 467

Criterion – Maïolino S., 279

Cryosuction – Coussy O., 507

Crystallization – Coussy O., 507

Curle – Ask J., 660

Cylinder – Fournier G., 273

D

Damage – Benallal A., 319 – Pompidou S., 405 – Gruescu C., 467

Damping – Muller P., 337

Data completion – Cimetière A., 123 – Andrieux S., 171

Deep-drawing – Moreau L., 371

Delaunay triangulation – Borouchaki H., 762

Delta wings – Rodriguez O., 773

Dielectric – Fen-Chong T., 425

Diffraction – Bailly C., 666

Direct numerical simulation – Shishkina O., 17 – Hauguel R., 95 – Poncet S., 783

Direct Numerical Simulation 3D – Rouvreau S., 265

Dirichlet Laplacian – Nazarov S.A., 305

Discontinuous Galerkin method – Delorme Ph., 676 – Özdemiir H., 719

Discontinuous Galerkin schemes – Dumbser M., 683

Dispersion – Vinkovic I., 325

Dissipation control – Massart T.J., 521

Distributed Lagrange multipliers – Pan T.-W., 884

Drag – Srinivasacharya D., 612

Drift-flux model – Grégoire O., 459

Dynamic subgrid model – Padilla E.L.M., 599

Dynamical systems – Cossu C., 331

E

Eigenmotions – Muller P., 337

Elasticity – Grillet L., 493

Elastoplasticity – Kermouche G., 389

Electric polarization – Al Radi M., 580

Energy conservation – Le Tallec P., 910

Energy dissipation – Magnain B., 419

Error estimation – Hay A., 103

Eshelby tensor – Gruescu C., 467

Evolution strategy – Poncet P., 65

Excited jet – Fleury V., 746

F

Fatigue – Jaubert A., 550

Ffowcs Williams and Hawkings analogy – Bailly C., 666

Fictitious domain methods – Pan T.-W., 884

Fictitious domains – van Loon R., 856

Finite difference methods – Müller B., 699

Finite elastoplastic deformation – Moreau L., 371

Finite element computations – Pompidou S., 405

Finite element method – Özdemiir H., 719 – Pan T.-W., 884 – Heuveline V., 896 – Lefebvre A., 923

Finite-volume – Hay A., 103

Flow – Skamnakis D., 628

Flow between parallel plates – Van Tuan N., 365

Flow front – Hattabi M., 585

Flow patterns – Ait Aider A., 197

Fluid mechanics – Hauguel R., 95 – Sellier A., 111 – Pons M., 127 – Pons M., 133 – Piquer E., 179 – Ait Aider A., 197 – Shikhmurzaev Y.D., 205 – Marin F., 227 – Piquet J., 257 – Fournier G., 273 – Vinkovic I., 325 – Cossu C., 331 – Clavin P., 379 – Accary G., 397 – Sellier A., 413 – Jédididi M., 447 – Al Radi M., 580 – Sellier A., 636 – Kozlov V., 733 – Fleury V., 746 – Fleury V., 754 – Ridha A., 768 – Fénot M., 778 – Poncet S., 783

Fluid-particle flow – Lefebvre A., 923

Fluid-structure – van Loon R., 856

Fluid-structure coupling – Heuveline V., 896

Fluid-structure interaction – Licht C., 117 – Čanić S., 867 – Le Tallec P., 910

Fluid/solid medium – Macocco K., 565

Forced convection – Doulfoukar Z., 499

Forces – Rebeyrotte A., 163

Forming – Moreau L., 371

Fracture mechanics – Bunger A.P., 299 – Jaubert A., 550

Free steady fall problem – Heuveline V., 896

Freezing – Fen-Chong T., 425 – Coussy O., 507

Friction – Mezlini S., 830

Friction factor – Mahfoud M., 513

Froude number – Kozlov V., 733

Fuzzy integral – Tran C., 605

G

Gas lubrication – Marušić-Paloka E., 534

Gaussian fluctuations – Druault Ph., 824

Gegenbauer postprocessing – Gottlieb D., 3

Glassy polymers – Zaïri F., 359

H

Hök–Brown – Maiolino S., 279
H-Refinement – Hay A., 103
Harmonic wave – Marin F., 227
Head-on collision – Lubin P., 351
Heart valves – van Loon R., 856
Heat transfer – Pons M., 127 – Pons M., 133 – Andrieux S., 171 – Shevtsova V., 311 – Van Tuan N., 365 – Münch C., 574 – Padilla E.L.M., 599
Heat transfer coefficient – Fénot M., 778
Hexahedral elements – Özdemir H., 719
High order – Müller B., 699
High-order finite volume schemes – Shishkina O., 17
Higher-order correlation effects – Ohta M., 642
Homogenization – Idiart M., 147 – Mélé P., 155 – Sab K., 187 – Suquet P., 219 – Ghergu M., 249 – Gruescu C., 467 – Rekik A., 789
Horseshoe vortex – Rouvreau S., 265
Hybrid method – Nordström J., 713
Hydraulic fracture – Bunger A.P., 299
Hydrodynamic lubrication models – Buscaglia G., 453
Hydrodynamics – Rebeyrotte A., 163

I

Ideal plasticity – Idiart M., 147
Identification method – Kermouche G., 389
Impact – Magnain B., 419
Implicit resolution – Le Dissez A., 796
Incompressible CFD – Ask J., 660
Incompressible flows – Krastev K., 59
Incompressible viscous flow – Scolan Y.-M., 487
Inertial confinement fusion – Clavin P., 379
Injection – Rodriguez O., 773
Instability – Shevtsova V., 311 – Cossu C., 331
Instability and transitions – Kolmychkov V.V., 739
Interface – Shevtsova V., 311 – Benallal A., 319 – Lacanette D., 343 – Pompidou S., 405
Internal parameter gradient – Nguyen Q.-S., 139
Interphase – Pompidou S., 405

Inverse problem – Cimetièrre A., 123 – Andrieux S., 171
IR thermography – Moreau S., 648
Irreversibility – Pons M., 127 – Pons M., 133

J

Jet – Skamnakis D., 628
Jet impingement – Fénot M., 778
Jointed medium – Maghous S., 285

L

Lagrange multipliers – van Loon R., 856
Lagrangian stochastic model – Vinkovic I., 325
Laguerre diagram – Borouchaki H., 762
Laminar wake – Doufoukar Z., 499
Laplace's equation – Cimetièrre A., 123
Large-eddy simulation – Pasquetti R., 39 – Fournier G., 273 – Padilla E.L.M., 599
Layered beams – Serpilli M., 593
LDA – Poncet S., 783
LES-VOF coupling – Lacanette D., 343
Lighthill's analogy – Bailly C., 666
Linear stability – Piquer E., 179
Linearization – Rekik A., 789
Linearized elasticity – Griso G., 475
Liquid composites molding – Hattabi M., 585
Localization – Massart T.J., 521 – Benallal A., 557
Low Mach number – Accary G., 397 – Golanski F., 688
Low Mach number flows – Munz C.-D., 706
Lubrication – Marušić-Paloka E., 534

M

Magnetic hard disk – Marušić-Paloka E., 534
Magnetic storage – Buscaglia G., 453
Magneto-hydrodynamics – Jédid M., 447
Marangoni effect – Shikhmurzaev Y.D., 205
Mass conservation – Bellomo N., 843
Measurable function – Tran C., 605
Melting – Coussy O., 507

Mesh derefinement – Moreau L., 371
Mesh refinement – Moreau L., 371
Micromechanical numerical simulations – Flandi L., 542
Micromechanics – Gruescu C., 467 – Sanahuja J., 818
Microstructures – He Q.-C., 439
Mixed convection – Piquer E., 179
Mode localisation – Jacques N., 804
Model 'in layers' – Flandi L., 542
Mohr–Coulomb – Maiolino S., 279
Morphology – Mélé P., 155
Multi-scale asymptotic analysis – Munz C.-D., 706
Multi-scale modelling – Massart T.J., 521
Multidimensional – Grégoire O., 459
Multigrid methods – Krastev K., 59
Multilayers – Pompidou S., 405
Mutual-probability prediction – Ohta M., 642

N

Nanocomposites – Mélé P., 155
Natural convection – Pons M., 127 – Pons M., 133 – Padilla E.L.M., 599
Navier–Stokes equations – Jinnah M.A., 235
Neutrally buoyant particles – Pan T.-W., 884
Non linear free surface effects – Rebeyrotte A., 163
Non Newtonian – Van Tuan N., 365
Non-circular duct – Mahfoud M., 513
Non-isothermal flow – Golanski F., 688
Non-linear semi-groups – Licht C., 117
Non-local generalized standard model – Nguyen Q.-S., 139
Non-Newtonian fluid flow – Mahfoud M., 513
Non-reflecting boundary condition – Guéaniff R., 694
Nonlinear behaviour – Idiart M., 147 – Suquet P., 219 – Zaïri F., 359 – Zaïri F., 431 – Rekik A., 789
Nonlinear elastodynamics – Le Tallec P., 910
Nonlinear homogenization – Sanahuja J., 818
Nonlinear sciences – Bellomo N., 843
Nonlinear wave – Porubov A.V., 528
Nonlocal criteria – Lahellec N., 293

Numerical simulation – Buscaglia G., 453 – Hattabi M., 585 – Kourta A., 810 – Mezlini S., 830
Numerical solution – Porubov A.V., 528

O

Open flow – Ait Aider A., 197
Operator-splitting methods – Pan T.-W., 884
Optimal perturbations – Cossu C., 331

P

Pairing noise – Fleury V., 746
Parametric probabilistic modelling – Macocco K., 565
Particle Image Velocimetry – Rouvreau S., 265
Particle–particle interactions – Sellier A., 413
Particulate flow – Pan T.-W., 884 – Heuveline V., 896
Passive scalar – Vinkovic I., 325
Path following method – Massart T.J., 521
PC – Moreau S., 648
Penalty method – Le Dissez A., 796
Percolation – Mélé P., 155
Perforations – Ghergu M., 249
Periodization – Sab K., 187
Perturbation – Benallal A., 557
Piezoelectricity – Ghergu M., 249
Piston effect – Pons M., 133 – Accary G., 397
Plane mixing layer – Druault Ph., 824
Plasticity – Halphen B., 617
PMMA – Moreau S., 648
Polymers – Moreau S., 648
Pore pressure – Coussy O., 507
Porous media – Idiart M., 147 – Fen-Chong T., 425 – Coussy O., 507 – Flandi L., 542 – Benallal A., 557 – Srinivasacharya D., 612 – Sanahuja J., 818
Porous sphere – Srinivasacharya D., 612
Porous viscoplastic materials – Flandi L., 542
Power diagram – Borouchaki H., 762
Preconditioner – Le Tallec P., 910
Pressure drop – Mahfoud M., 513
Pressure-strain – Piquet J., 257
Propagation in flows – Bailly C., 666

Proper Orthogonal Decomposition – Druault Ph., 824
Pseudo-spectral methods – Krastev K., 59
Pulsating – Skamnakis D., 628

R

Random media – Sab K., 187
Rarefaction effects – Buscaglia G., 453
Rate of flow – Kozlov V., 733
Rayleigh–Bénard convection – Shishkina O., 17
Rayleigh–Bénard instability – Accary G., 397
Rayleigh–Taylor instability – Clavin P., 379
Rayleigh’s criterion – Laverdant A., 29
Reactive flows – Gottlieb D., 3
Realisability – Piquet J., 257
Regular triangulation – Borouchaki H., 762
Relative density – Tran C., 605
Relaxation – Coussy O., 507
Representative stress – Kermouche G., 389
Representative volume element – Sab K., 187
Resonant cavity – Marin F., 227
Rheological models – Muller P., 337
Rheology – Muller P., 337 – Mahfoud M., 513
Richtmyer–Meshkov – Gottlieb D., 3
Rigorous asymptotic analysis – Marušić-Paloka E., 534
Ripples – Marin F., 227
Rocks – Maiolino S., 279
Rotor–stator system – Poncet S., 783
Rupture – Maghous S., 285 – Lahellec N., 293 – Bunger A.P., 299

S

Second order – Rekek A., 789
Sedimentation – Sellier A., 413
Segré–Silberberg effect – Pan T.-W., 884
Shallow water equations – Le Dissez A., 796
Shape optimization – Jouve F., 243
Shape optimization problem – Nazarov S.A., 305
Shells – Ghergu M., 249

Shock waves – Gottlieb D., 3 – Jinnah M.A., 235
Shock-fitting – Sesterhenn J., 87
Shock/turbulence interaction – Jinnah M.A., 235
Size effect – Lahellec N., 293
Small amplitude – Kozlov V., 733
Snap-back – Massart T.J., 521
Soils – Maiolino S., 279 – Tran C., 605
Solid mechanics – He Q.-C., 439
Solid–liquid flow – Pan T.-W., 884
Solids and structures – Cimetière A., 123 – Maghous S., 285 – Moreau L., 371 – Kermouche G., 389 – Halphen B., 617 – Jacques N., 804
Solitary wave – Lubin P., 351 – Porubov A.V., 528
Solitons – Marin F., 227
Soret effect – Piquer E., 179
Sound generation – Nordström J., 713
Sound propagation – Nordström J., 713
Spectral methods – Gottlieb D., 3 – Pasquetti R., 39
Spectral/hp element method – Miliou A., 211
Spherical container – Srinivasacharya D., 612
Stability – Jéjédi M., 447 – Skamnakis D., 628 – Nordström J., 713
Stabilization method – Guéanff R., 694
State variable – Nguyen Q.-S., 139
Steady water waves – Kozlov V., 733
Strength – Sanahuja J., 818
Structures – Halphen B., 617
Subgrid models – Razafindralandy D., 481
Subgrid-scale – Vinkovic I., 325
Subharmonic – Fleury V., 746
Supercooling – Fen-Chong T., 425
Supercritical fluid – Accary G., 397
Superdirective acoustic radiation – Fleury V., 754
Superdirective radiation – Fleury V., 746
Surface energy – Jaubert A., 550
Surface tension – Zaïri F., 431 – Al Radi M., 580
Symmetry group – Razafindralandy D., 481
Symmetry-preserving discretization – Verstappen R., 51
Synthetic – Skamnakis D., 628

T

Taylor–Dean – Ait Aider A., 197
Temperature – Halphen B., 617

Temperature gradient – Nguyen Q.-S., 139
Thawing – Fen-Chong T., 425
Thermo-hydro-mechanical coupling – Benallal A., 557
Thermocapillarity – Sellier A., 111 – Sellier A., 636
Thermodependent – Van Tuan N., 365
Thermodynamics – Pons M., 127 – Pons M., 133
Thermoelasticity – Moreau S., 648
Thin films – Shikhmurzaev Y.D., 205
Thin plates – Jacques N., 804
Thin-walled rod – Grillet L., 493
Three-dimensional wake – Poncet P., 65
Three-layer system – Shevtsova V., 311
Time domain – Rebeyrotte A., 163
Time integration – Le Tallec P., 910
Timoshenko's beam – Griso G., 475
Topological transitions – Shikhmurzaev Y.D., 205
Topology – Rouvreau S., 265
Traffic flow models – Bellomo N., 843
Transition to turbulence – Padilla E.L.M., 599
Transonic flow – Kourta A., 810
Truth measure – Tran C., 605
Turbulence – Piquet J., 257 – Lacanette D., 343 – Razafindralandy D., 481 – Münch C., 574 – Balarac G., 622 – Rodriguez O., 773 – Poncet S., 783 – Kourta A., 810 – Druault Ph., 824
Turbulence microscales – Sesterhenn J., 87

Turbulence model – Jinnah M.A., 235 – Kourta A., 810
Turbulent combustion – Hauguel R., 95
Turbulent Flow – Hay A., 103
Turbulent premixed flame – Laverdant A., 29
Two fluid system – Papin M., 838
Two-dimensional potential flow – Scolan Y.-M., 487
Two-phase flow – Lubin P., 351

U

Undercooling – Coussy O., 507
Unfolding method – Griso G., 475
Unfrozen water – Fen-Chong T., 425
Unsteady – Rebeyrotte A., 163
Unstructured grids – Dumbser M., 683

V

Velocity jump – Maghous S., 285
Very high order methods – Dumbser M., 683
Vibrations – Muller P., 337
Video display terminal environment – Ohta M., 642
Viscoelastic behaviour – Mélé P., 155
Viscoelasticity – Muller P., 337 – Zaïri F., 359
Viscoplasticity – Zaïri F., 359 – Zaïri F., 431
Visualisation – Ait Aider A., 197
Void fraction – Grégoire O., 459
Void growth – Zaïri F., 431
Volume penalization – Paccou A., 79

Voronoi diagram – Borouchaki H., 762
Vortex breakdown – Rodriguez O., 773
Vortex identification technique – Miliou A., 211
Vortex pairing noise – Fleury V., 754

W

Wake flows – Pasquetti R., 39
Wall correction factor – Srinivasa-charya D., 612
Wall-bubble interactions – Sellier A., 636
Wall-particle interactions – Sellier A., 413
Wave environmental factors – Ohta M., 642
Wave equation – Paccou A., 79
Wave pattern – Rebeyrotte A., 163
Wavelength selection – Jacques N., 804
Waves – Porubov A.V., 528 – Macocco K., 565 – Ohta M., 642
Wear – Mezlini S., 830
Wetting and drying – Le Dissez A., 796
Woven laminate – Lahellec N., 293

Y

Yield function – Maïolino S., 279

Z

Zero incidence flow – Ridha A., 768