



## CONTENTS

[www.elsevier.com/locate/jcp](http://www.elsevier.com/locate/jcp)

Abstracted/indexed in ACM Guide to Computing Literature, Chemical Abstracts, CompuMath Citation Index, Current Contents/Physics / Chemistry & Earth Science, Excerpta Medica, Mathematical Reviews, Research Alert, Science Abstracts, Science Citation Index. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

## REGULAR ARTICLES

- 5361 **Reconstruction of multi-material interfaces from moment data**  
V. Dyadechko and M. Shashkov
- 5385 **Verification of a fluid-dynamics solver using correlations with linear stability results**  
G. Matheou, C. Pantano and P.E. Dimotakis
- 5397 **Validation of a simple method for representing spheres and slender bodies in an immersed boundary method for Stokes flow on an unbounded domain**  
T.T. Bringley and C.S. Peskin
- 5426 **A discontinuous Galerkin finite element discretization of the Euler equations for compressible and incompressible fluids**  
L. Pesch and J.J.W. van der Vegt
- 5447 **The parabolic edge reconstruction method (PERM) for Lagrangian particle advection**  
R. McDermott and S.B. Pope
- 5492 **Multi-symplectic integration of the Camassa–Holm equation**  
D. Cohen, B. Owren and X. Raynaud
- 5513 **Time-harmonic elasticity with controllability and higher-order discretization methods**  
S. Mönkölä, E. Heikkola, A. Pennanen and T. Rossi
- 5535 **Quasi-equilibrium grid algorithm: Geometric construction for model reduction**  
E. Chiavazzo and I.V. Karlin
- 5561 **A semi-implicit level set method for structural shape and topology optimization**  
J. Luo, Z. Luo, L. Chen, L. Tong and M.Y. Wang
- 5582 **Full  $f$  gyrokinetic method for particle simulation of tokamak transport**  
J.A. Heikkinen, S.J. Janhunen, T.P. Kiviniemi and F. Ogando
- 5610 **An adaptive wavelet collocation method for the solution of partial differential equations on the sphere**  
M. Mehra and N.K.-R. Kevlahan
- 5633 **Finite-difference modeling of the electroseismic logging in a fluid-saturated porous formation**  
W. Guan and H. Hu
- 5649 **An explicit discontinuous Galerkin scheme with local time-stepping for general unsteady diffusion equations**  
F. Lörcher, G. Gassner and C.-D. Munz

*Continued inside*

0021-9991(20080510)227:11;1-F

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)