

Publications by Jan Nordström

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Articles under review

1. S. Eriksson & J. Nordström, Exact Non-Reflecting Boundary Conditions Revisited: Well-Posedness and Stability.
2. S. Ghader & J. Nordström, High-order compact finite difference schemes for the spherical shallow water equations.
3. J. Nordström & M. Wahlsten, Variance reduction through robust design of boundary conditions for stochastic hyperbolic systems of equations
4. H. Frenander & J. Nordström, Spurious solutions for the advection-diffusion equation using wide stencils for approximating the second derivative.
5. P. Pettersson, G. Iaccarino & J. Nordström Polynomial Chaos Methods for Hyperbolic Partial Differential Equations (Numerical Simulations of Fluid Dynamics Problems in the Presence of Uncertainties), Springer book.
6. J. Nordström & T. Lundquist, Summation-by-parts in Time: the Second Derivative.
7. C. La Cognata & J. Nordström, Well-posedness, Stability and Conservation for a Discontinuous Interface Problem.
8. T. Lundquist & J. Nordström, Efficient Fully Discrete Summation-by-parts Schemes for Unsteady Flow Problems.
9. S. Nikkar & J. Nordström, Fully Discrete Energy Stable High Order Finite Difference Methods for Hyperbolic Problems in Deforming Domains.
10. J. Nordström & S. Ghader, A new well-posed vorticity divergence formulation of the shallow water equations.
11. H. Frenander & J. Nordström, A Provable Stable and Accurate Davies-like Relaxation Procedure Using Multiple Penalty Terms for Lateral Boundaries in Weather Prediction.

Articles

74. O. O'Reilly, J. Nordström, J. E. Kozdon & E. M. Dunham, Simulation of Earthquake Rupture Dynamics in Complex Geometries Using Coupled Finite Difference and Finite Volume Methods, accepted in *Communications in Computational Physics*.
73. B. A. Erickson & J. Nordström, Stable, High Order Accurate Adaptive Schemes for Long Time, Highly Intermittent Geophysics Problems, *Journal of Computational and Applied Mathematics* 271, pp. 328338, 2014.
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67. P. Pettersson, G. Iaccarino & J. Nordström, A stochastic Galerkin method for the Euler equations with Roe variable transformation, *Journal of Computational Physics*, Volume 257, Part A, pp.481-500, 2014.
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Conference papers

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