

## **LIST OF PUBLICATIONS (in the reversed chronological order)**

- [13] S. Chu and A. Kurganov, *New Adaptive Low-Dissipation Central-Upwind Schemes*, submitted to ESAIM: Mathematical Modelling and Numerical Analysis.
- [12] S. Chu, A. Kurganov and R. Xin, *Low-Dissipation Central-Upwind Schemes for Compressible Multifluids*, submitted to Journal of Computational Physics.
- [11] A. Chertock, S. Chu, and A. Kurganov, *Accurate Deterministic Projection Methods for Stiff Detonation Waves*, to appear in Communications in Mathematical Sciences.
- [10] S. Chu and A. Kurganov, *Local Characteristic Decomposition Based Central-Upwind Scheme for Compressible Multifluids*, Proceedings of Finite Volumes for Complex Applications X (Strasbourg, 2023).
- [9] S. Chu, O. Kovyrykina, A. Kurganov, and V. Ostapenko, *Experimental Convergence Rate Study for Three Shock-Capturing Schemes and Development of Highly Accurate Combined Schemes*, Numerical Methods for Partial Differential Equations, 39 (2023), pp. 4317-4346.
- [8] V. A. Kolotilov, A. A. Kurganov, V. V. Ostapenko, N. A. Khandeeva and S. Chu, *On the Accuracy of Shock-Capturing Schemes Calculating Gas-Dynamic Shock Waves*, Computational Mathematics and Mathematical Physics, 63 (2023), pp. 1341-1349.
- [7] A. Chertock, S. Chu and A. Kurganov, *Adaptive High-Order A-WENO Schemes Based on a New Local Smoothness Indicator*, East Asian Journal on Applied Mathematics, 13 (2023), pp. 576-609.
- [6] S. Chu, A. Kurganov and R. Xin, *A Fifth-Order A-WENO Scheme Based on the Low-Dissipation Central-Upwind Fluxes*, Proceedings of the XVIII International Conference on Hyperbolic Problems: Theory, Numerics, Applications.
- [5] S. Chu, A. Kurganov, S. Mohammadian and Z. D. Zheng, *Fifth-Order A-WENO Path-Conservative Central-Upwind Scheme for Behavioral Non-Equilibrium Traffic Models*, Communications in Computational Physics, 33 (2023), pp. 692-732.
- [4] S. Chu and A. Kurganov, *Flux Globalization Based Well-Balanced Central-Upwind Scheme for One-Dimensional Blood Flow Models*, Calcolo, 60 (2023), Paper No. 2, 35 pp.
- [3] A. Chertock, S. Chu, M. Herty, A. Kurganov and M. Lukáčová-Medvidová, *Local Characteristic Decomposition Based Central-Upwind Scheme*, Journal of Computational Physics, 473 (2023), Paper No. 111718, 24 pp.
- [2] S. Chu, A. Kurganov and M. Na, *Fifth-Order A-WENO Schemes Based on the Path-Conservative Central-Upwind Method*, Journal of Computational Physics, 469 (2022), Paper No. 111508, 22 pp.
- [1] A. Chertock, S. Chu and A. Kurganov, *Hybrid Multifluid Algorithms Based on the Path-Conservative Central-Upwind Scheme*, Journal of Scientific Computing, 89 (2021), Paper No. 48, 24 pp.