

## Bibliography

- [1] M N A Alamsyah, C A Simanjuntak, B A R H Bagustara, W A Pradana, and P H Gunawan. Openmp analysis for lid driven cavity simulation using lattice boltzmann method. In *Information and Communication Technology (ICoICT7), 2017 5th International Conference on*, pages 1–6. IEEE, 2017.
- [2] Emmanuel Audusse, François Bouchut, Marie-Odile Bristeau, Rupert Klein, and Benoît Perthame. A fast and stable well-balanced scheme with hydrostatic reconstruction for shallow water flows. *SIAM Journal on Scientific Computing*, 25(6):2050–2065, 2004.
- [3] François Bouchut. *Nonlinear stability of finite Volume Methods for hyperbolic conservation laws: And Well-Balanced schemes for sources*. Frontiers in Mathematics. Birkhäuser Verlag, Basel, 2004.
- [4] André R Brodtkorb, Martin L Sætra, and Mustafa Altınakar. Efficient shallow water simulations on gpus: Implementation, visualization, verification, and validation. *Computers & Fluids*, 55:1–12, 2012.
- [5] D Castillo, AM Ferreiro, José A García-Rodríguez, and Carlos Vázquez. Numerical methods to solve pde models for pricing business companies in different regimes and implementation in gpus. *Applied Mathematics and Computation*, 219(24):11233–11257, 2013.
- [6] Hudong Chen, Shiyi Chen, and William H Matthaeus. Recovery of the navier-stokes equations using a lattice-gas boltzmann method. *Physical Review A*, 45(8):R5339, 1992.
- [7] Shiyi Chen and Gary D Doolen. Lattice boltzmann method for fluid flows. *Annual review of fluid mechanics*, 30(1):329–364, 1998.
- [8] Leonardo Dagum and Ramesh Menon. Openmp: an industry standard api for shared-memory programming. *IEEE computational science and engineering*, 5(1):46–55, 1998.

- [9] M de la Asunción, MJ Castro, JM Mantas, and S Ortega. Numerical simulation of tsunamis generated by landslides on multiple gpus. *Advances in Engineering Software*, 99:59–72, 2016.
- [10] Marc De La Asunción, José M Mantas, and Manuel J Castro. Simulation of one-layer shallow water systems on multicore and cuda architectures. *The Journal of Supercomputing*, 58(2):206–214, 2011.
- [11] Olivier Delestre, Stéphane Cordier, François James, and Frédéric Darboux. Simulation of rain-water overland-flow. In *12th International Conference on Hyperbolic Problems*, volume 67, pages 537–546. American Mathematical Society, 2008.
- [12] Olivier Delestre and Fabien Marche. A numerical scheme for a viscous shallow water model with friction. *Journal of Scientific Computing*, 48(1-3):41–51, 2011.
- [13] David Doyen and Putu Harry Gunawan. An explicit staggered finite volume scheme for the shallow water equations. In *Finite Volumes for Complex Applications VII-Methods and Theoretical Aspects*, pages 227–235. Springer, 2014.
- [14] Yan Guangwu. A lattice boltzmann equation for waves. *Journal of Computational Physics*, 161(1):61–69, 2000.
- [15] Putu Harry Gunawan. Scientific parallel computing for 1d heat diffusion problem based on openmp. In *Information and Communication Technology (ICoICT), 2016 4th International Conference on*, pages 1–5. IEEE, 2016.
- [16] Putu Harry Gunawan and Xavier Lhébrard. Hydrostatic relaxation scheme for the 1d shallow water-exner equations in bedload transport. *Computers & Fluids*, 121:44–50, 2015.
- [17] Xiaoyi He and Li-Shi Luo. A priori derivation of the lattice boltzmann equation. *Physical Review E*, 55(6):R6333, 1997.
- [18] FJ Higuera and J Jimenez. Boltzmann approach to lattice gas simulations. *EPL (Europhysics Letters)*, 9(7):663, 1989.
- [19] Iryanto and P H Gunawan. An openmp parallel godunov scheme for 1d two phase oil displacement problem. In *Information and Communication Technology (ICoICT), 2017 5th International Conference on*, pages 1–5. IEEE, 2017.

- [20] S Juliati and P H Gunawan. Openmp architecture to simulate 2d water oscillation on paraboloid. In *Information and Communication Technology (ICoIC7), 2017 5th International Conference on*, pages 1–5. IEEE, 2017.
- [21] Renwei Mei, Li-Shi Luo, and Wei Shyy. An accurate curved boundary treatment in the lattice boltzmann method. *Journal of computational physics*, 155(2):307–330, 1999.
- [22] Abdulmajeed A Mohamad. *Lattice Boltzmann method: fundamentals and engineering applications with computer codes*. Springer Science & Business Media, 2011.
- [23] Mulyani, Novella D Putri, and P H Gunawan. The performance of openmp architecture for simulating fire spreading in forest area by cellular automata. In *Information and Communication Technology (ICoIC7), 2017 5th International Conference on*, pages 1–5. IEEE, 2017.
- [24] M R Pahlevi and P H Gunawan. Parallel processing for simulating 2d radial dambreak using fvm hllc flux on openmp. In *Information and Communication Technology (ICoIC7), 2017 5th International Conference on*, pages 1–4. IEEE, 2017.
- [25] PA Skordos. Initial and boundary conditions for the lattice boltzmann method. *Physical Review E*, 48(6):4823, 1993.
- [26] Jian Guo Zhou. *Lattice Boltzmann methods for shallow water flows*, volume 4. Springer, 2004.