

## **Future Contributions to *Journal of Statistical Physics***

This special issue contains papers presented at the Advanced Research Workshop on Lattice Gas Automata and is dedicated to Michel Hénon on the occasion of his 60th birthday

### *ARTICLES*

Foreword

*Jean Pierre Boon*

Program

Implementation of the FCHC Lattice Gas Model on the Connection Machine

*M. Hénon*

Lattice Boltzmann Computational Fluid Dynamics in Three Dimensions

*Shiyi Chen, Zheng Wang, Xiaowen Shan, and Gary D. Doolen*

The Lattice Boltzmann Equation on Irregular Lattices

*Francesca Nannelli and Sauro Succi*

Lattice-Gas and Lattice-Boltzmann Models of Miscible Fluids

*Richard Holme and Daniel H. Rothman*

Biased Lattice Gases with Correlated Equilibrium States

*H. J. Bussemaker and M. H. Ernst*

Global Invariants and Equilibrium States in Lattice Gasses

*D. Bernardin*

Phase Transitions in a Probabilistic Cellular Automaton: Growth Kinetics and Critical Properties

*F. J. Alexander, I. Edrei, P. L. Garrido, and J. L. Lebowitz*

Lattice Gas Simulations of Osmosis

*E. G. Flekkøy, J. Feder, and T. Jøssang*

Magnetohydrodynamics Computations with Lattice Gas Automata

*Shiyi Chen, Daniel O. Martinez, W. H. Matthaeus, and Hudong Chen*

Reynolds Stresses in a Lattice Gas

*F. Hayot*

Diffusion Simulation with a Deterministic One-Dimensional Lattice-Gas Model

*Y. H. Qian, D. d'Humieres, and P. Lallemand*

Lattice Gases and Exactly Solvable Models

*Brosi Hasslacher and David A. Meyer*

The Lattice Boltzmann Phononic Lattice Solid

*Peter Mora*

† A Stochastic Lattice Gas for Burgers' Equation: A Practical Study

*Leesa Brieger and Ernesto Bonomi*

Bibliography

† To appear in a later issue.