

Proceedings of the conference

“DSFD-2014-Paris”

A total of 31 articles have been published after the conference “Discrete Simulation of Fluid Dynamics”, Paris, July 28-August 1, 2014: 14 in the *Journal of Statistical Physics*, 8 in *Comptes Rendus Mécanique*, 6 in *ESAIM Proceedings and Surveys* and 3 in *Mechanics and Industry*. We detail in the following pages the names of the authors, the titles and the exact references.

04 february 2016

Journal of Statistical Physics

S. Dellacherie, F. Dubois, S. Fauve, R. Gatignol, D. d’Humières
Discrete Simulation of Fluid Dynamics,
Paris, Ecole Normale Supérieure, July 28-August 1, 2014
December 2015, Volume 161, Issue 6, pp 1325-1326,
doi: 10.1007/s10955-015-1407-6.

Q. Mao, K.H. Luo,
Molecular Dynamics Simulation of Sintering Dynamics of Many TiO₂ Nanoparticles
September 2015, Volume 160, Issue 6, pp 1696-1708,
doi: 10.1007/s10955-015-1304-z.

A. Bobylev, I. Gamba, I. Potapenko
On Some Properties of the Landau Kinetic Equation
December 2015, Volume 161, Issue 6, pp 1327-1338,
doi: 10.1007/s10955-015-1311-0.

B.M. Boghosian, M. Johnson, J.A. Marcq
An H Theorem for Boltzmann’s Equation for the Yard-Sale Model of Asset Exchange
December 2015, Volume 161, Issue 6, pp 1339-1350,
doi: 10.1007/s10955-015-1316-8.

R. Benzi, L. Biferale
Homogeneous and Isotropic Turbulence: A Short Survey on Recent Developments
December 2015, Volume 161, Issue 6, pp 1351-1365,
doi: 10.1007/s10955-015-1323-9.

J.P. Boon, J.F. Lutsko
Nonlinear Theory of Anomalous Diffusion and Application to Fluorescence Correlation Spectroscopy
December 2015, Volume 161, Issue 6, pp 1366-1378,
doi: 10.1007/s10955-015-1315-9.

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J. Herault, F. Pétrélis, S. Fauve

$1/f^\alpha$ Low Frequency Fluctuations in Turbulent Flows

December 2015, Volume 161, Issue 6, pp 1379-1389,

doi: 10.1007/s10955-015-1408-5.

A. De Rosis, F. Ubertini, S. Ubertini, S. Succi

The Role of Very Low-Reynolds Hydrodynamics on the Transfer of Information Among Active Agents

December 2015, Volume 161, Issue 6, pp 1390-1403,

doi: 10.1007/s10955-015-1312-z.

A. Montessori, G. Falcucci, M. La Rocca, S. Ansumali, S. Succi

Three-Dimensional Lattice Pseudo-Potentials for Multiphase Flow Simulations at High Density Ratios

December 2015, Volume 161, Issue 6, pp 1404-1419,

doi: 10.1007/s10955-015-1318-6.

A. Mazloomi, S.S. Chikatamarla, I.V. Karlin

Simulation of Droplets Collisions Using Two-Phase Entropic Lattice Boltzmann Method

December 2015, Volume 161, Issue 6, pp 1420-1433,

doi: 10.1007/s10955-015-1329-3.

N. Frapolli, S.S. Chikatamarla, I. Karlin

Simulations of Heated Bluff-Bodies with the Multi-Speed Entropic Lattice Boltzmann Method

December 2015, Volume 161, Issue 6, pp 1434-1452,

doi: 10.1007/s10955-015-1373-z.

T. Zhang, B. Shi, C. Huang, H. Liang

Pore-Scale Study of Miscible Displacements in Porous Media Using Lattice Boltzmann Method

December 2015, Volume 161, Issue 6, pp 1453-1481,

doi: 10.1007/s10955-015-1371-1.

A. Scagliarini, M. Sbragaglia, M. Bernaschi

Mesoscopic Simulation Study of Wall Roughness Effects in Micro-channel Flows of Dense Emulsions

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K. Stratford, A. Gray, J.S. Lintuvuori

Large Colloids in Cholesteric Liquid Crystals

December 2015, Volume 161, Issue 6, pp 1496-1507,

doi: 10.1007/s10955-015-1411-x.

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G. Tóth, I.M. Jánosi

Vorticity Generation by Rough Walls in 2D Decaying Turbulence

December 2015, Volume 161, Issue 6, pp 1508-1518,

doi: 10.1007/s10955-015-1375-x.

Comptes Rendus Mécanique

S. Dellacherie, F. Dubois, S. Fauve, R. Gatignol

Lattice Boltzmann methods for solving problems in mechanics

Discrete Simulation of Fluid Dynamics, foreword

Volume 343, Issues 10-11, October-November 2015, Pages 515-517,

doi: 10.1016/j.crme.2015.07.009.

I. Ginzburg, L. Roux, G. Silva

Local boundary reflections in lattice Boltzmann schemes: Spurious boundary layers and their impact on the velocity, diffusion and dispersion

Volume 343, Issues 10-11, October-November 2015, Pages 518-532,

doi: 10.1016/j.crme.2015.03.004.

C. Sun, F. Péröt, R. Zhang, P.T. Lew, A. Mann, V. Gupta, D.M. Freed, I. Staroselsky, H. Chen

Lattice Boltzmann formulation for flows with acoustic porous media

Volume 343, Issues 10-11, October-November 2015, Pages 533-544,

doi: 10.1016/j.crme.2015.07.013.

G. Silva, I. Ginzburg

The permeability and quality of velocity field in a square array of solid and permeable cylindrical obstacles with the TRT-LBM and FEM Brinkman schemes

Volume 343, Issues 10-11, October-November 2015, Pages 545-558,

doi: 10.1016/j.crme.2015.05.003.

H. Otomo, H. Fan, R. Hazlett, Y. Li, I. Staroselsky, R. Zhang, H. Chen

Simulation of residual oil displacement in a sinusoidal channel with the lattice Boltzmann method

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A.M. Velasco, J.D. Muñoz

Study of hydrodynamic instabilities with a multiphase lattice Boltzmann model

Volume 343, Issues 10-11, October-November 2015, Pages 571-579,

doi: 10.1016/j.crme.2015.07.014

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T. Biciușă, A. Horga, V. Sofonea

Simulation of liquid-vapour phase separation on GPUs using Lattice Boltzmann models with off-lattice velocity sets

Volume 343, Issues 10-11, October-November 2015, Pages 580-588,

doi: 10.1016/j.crme.2015.07.011

S.C. Fu, W.T. Yuen, C. Wu, C. Yu-Hang Chao

Finite-difference lattice Boltzmann simulation on acoustics-induced particle deposition

Volume 343, Issues 10-11, October-November 2015, Pages 589-598,

doi: 10.1016/j.crme.2015.07.012.

F. Dubois, T. Février, B. Graille

On the stability of a relative velocity lattice Boltzmann scheme for compressible Navier-Stokes equations

Volume 343, Issues 10-11, October-November 2015, Pages 599-610,

doi: 10.1016/j.crme.2015.07.010.

ESAIM Proceedings and Surveys

S. Dellacherie, F. Dubois, S. Fauve, R. Gatignol

Lattice Boltzmann methods and numerical analysis. Foreword

December 2015, Vol. 52, p. I-III,

doi: <http://dx.doi.org/10.1051/proc/20155200f>.

F. Bösch, S.S. Chikatamarla, I. Karlin

Entropic Multi-Relaxation Models for Simulation of Fluid Turbulence

December 2015, Vol. 52, p. 1-24,

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F. Dubois, P. Lallemand, M.M. Tekitek

Taylor expansion method for analyzing bounce-back boundary conditions for lattice Boltzmann method

December 2015, Vol. 52, p. 25-46,

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D. Heubes, A. Bartel, M. Ehrhardt

Discrete Artificial Boundary Conditions for the Lattice Boltzmann Method in 2D

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F. Mohseni, M. Mendoza, S. Succi, H.J. Herrmann

Cooling Effect of the Richtmyer-Meshkov Instability

December 2015, Vol. 52, p. 66-75,

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P.J. Dellar

Quantum lattice algorithms: similarities and connections to some classic finite difference algorithms

December 2015, Vol. 52, p. 76-104,

doi: <http://dx.doi.org/10.1051/proc/201552005>.

S. Dellacherie, J. Jung, P. Omnes

Preliminary results for the study of the godunov scheme applied to the linear wave equation with porosity at low mach number

December 2015, Vol. 52, p. 105-126,

doi: <http://dx.doi.org/10.1051/proc/201552006>.

Mechanics and Industry

S. Dellacherie, F. Dubois, S. Fauve, R. Gatignol

Editorial

February 2016, Vol. 17, issue 2, article 201, doi: 10.1051/meca/2015072.

X. Nie, V. Gundepalli, Y. Mu, R. Sungkorn, J. Toelke

Numerical Investigation of Oil-water Drainage and Imbibition in Digitized Sandstones

February 2016, Vol. 17, issue 2, article 202, doi: 10.1051/meca/2015069.

R. Straka

Numerical Simulation of Heat Transfer in Packed Beds by Two Population Thermal Lattice Boltzmann Method

February 2016, Vol. 17, issue 2, article 203, doi: 10.1051/meca/2015071.

X. He, X. Zhang, S. Yang, J. Zhu, J. Yan

Experiment and Numerical Simulation of a Valveless Piezoelectric Micropump Applying Coanda Effect

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