

CURRICULUM VITAE

Ahad ZARGHAMI

Researcher,
H2CU, Honors Center of Italian Universities,
University of Rome La Sapienza,
Italy.
e-mail: ahad.zarghami@gmail.com



Research Interests

CFD, Lattice Boltzmann Method, Heat Transfer, Porous Media, Nano-Fluids, Free Surface Flows.

Educational Records

1999-2004	<i>Persian Gulf University</i>	Boushehr, Iran
	B.Sc. of Mechanical Engineering-Mechanics in Heat and Fluids.	
2004-2007	<i>Shahrood University of Technology</i>	Shahrood, Iran
	M.Sc. of Mechanical Engineering- Energy Conversion.	
2007-2012	<i>Shahrood University of Technology</i>	Shahrood, Iran
	Ph.D. of Mechanical Engineering- Fluid Mechanics.	

Publications

I) Journal Papers

- 1- **A. Zarghami**, G. Falcucci, E. Janelli, S. Succi, M. Porfiri, S. Ubertini, “Lattice Boltzmann Modeling of Water Entry Problems”, (Submitted)
- 2- **A. Zarghami**, C. Biscarini, S. Succi, S. Ubertini, “Hydrodynamics in Porous Media: a FV-LB Study”, *Journal of Scientific Computing*, 59 (1), pp. 80-103- 2014.
- 3- **A. Zarghami**, N. Ahmadi, A Stable Lattice Boltzmann Method for Steady Backward-Facing Step Flow, *Arabian Journal for Science and Engineering*, (accepted)
- 4- **A. Zarghami**, S. Ubertini, S. Succi, “Finite Volume Formulation of Thermal Lattice Boltzmann Method”, *Int. J. Numerical Methods for Heat & Fluid Flow*, Vol. 24 (2), pp. 270-289, 2014.
- 5- **A. Zarghami**, S. Di Francesco, C. Biscarini, “Porous Substrate Effects on Thermal Flows through a REV-Scale Finite Volume Lattice Boltzmann Model”, *Int. J. Modern Phys. C*, 25 (2), 1350086, 2014.

- 6- **A. Zarghami**, P. Omidvar, "Finite Volume Lattice Boltzmann Modeling of Time-Dependent Flows", *Scientia Iranica B*, Vol. 20 (6), pp. 1812-1823, 2013.
- 7- **A. Zarghami**, S. Ubertini, S. Succi, "Finite Volume Lattice Boltzmann Modeling of Thermal Transport in Nanofluids", *Computers and Fluids*, Vol. 77, pp. 56-65, 2013.
- 8- **A. Zarghami**, N. Ahmadi, "Study of Skin Friction in Channels by Lattice Boltzmann Method", *Int. J. Advanced Design and Manufacturing Technology*, 6 (3), pp.91-98, 2013.
- 9- **A. Zarghami**, M.J. Maghrebi, J. Ghasemi, S. Ubertini, "Lattice Boltzmann Finite Volume Formulation with Improved Stability", *Communications in Computational Physics*, 12(1), pp. 42-64, 2012.
- 10- **A. Zarghami**, M.J. Maghrebi, S. Ubertini, S. Succi, "Modeling of Bifurcation Phenomena in Suddenly Expanded Flows with a New Finite Volume Lattice Boltzmann Method", *Int. J. Modern Phys. C*, 22(9), pp.977-1003, 2011.
- 11- **A. Zarghami**, M.J. Maghrebi, "Thermo-Hydrodynamic Analysis of Duct Flow using Lattice Boltzmann Method", *Journal of Solid and Fluid Mechanics*, 1(2), pp. 81-90, 2011. (Persian Language)
- 12- M.J. Maghrebi, **A. Zarghami**, "DNS of Forced Mixing Layer", *Int. J. Numerical Analysis and Modeling*, 7(1), pp.173-193, 2010.
- 13- N. Ahmadi, **A. Zarghami**, "A New Approach to Heart Failure Prognosis based on Combination of Machine Learning and Fuzzy Clustering", *Int. J. Computer Technology and Applications*, 2(1), pp.199-206, 2011.
- 14- **A. Zarghami**, M.J. Maghrebi, J. Ghasemi, "Finite Volume-Lattice Boltzmann Modeling of Viscous Flows", *Int. J. Advanced Design and Manufacturing Technology*, 4(2), pp.11-19, 2011. (Persian Language)
- 15- M.J. Maghrebi, H. Eazi, **A. Zarghami**, "Direct Numerical Simulation of 2D Forced Jet Using Compact Finite Difference Method", *Modares Journal of Mechanical Engineering*, 10(3), pp.9-20, 2010. (Persian Language)
- 16- **A. Zarghami**, M. Feizabadi Farahani, M.J. Maghrebi, "Study of Forced Boundary Layer by Means of DNS", *IJMMSA*, 3(4), pp.347-365, 2010.
- 17- **A. Zarghami**, K. Moradi, M. Farzaneh-Gord, "Simulation of Natural Gas EOS (Equation of State) Investigation using Peng-Robinson EOS: Case Study on Iran Shanol Gas Region", *IJMMSA*, 2(1), pp.92-100, 2009.
- 18- M.J. Maghrebi, **A. Zarghami**, M. Feizabadi Farahani, "Direct Numerical Simulation of 2D Incompressible Steady Mixing Layer", *IJMMSA*, 1(2), pp.197-214, 2008.
- 19- M.J. Maghrebi, **A. Zarghami**, K. Moradi, "Linear Stability Analysis of Spatially Growing Mixing Layer using Spectral Method", *IJMMSA*, 1(3), pp.291-304, 2008.

- 20- K.Moradi, J.Khodakhah, **A. Zarghami**, “A New Approach on CFD Analysis of Boundary Layer Flow”, *IJMMSA*, 1(4), pp.371-379, 2008.
- 21- M.J.Maghrebi, **A. Zarghami**, M.Feizabadi Farahani, “A Study of Forced Boundary Layer Self-Similarity by means of DNS”, *Int. J. Theoretical and Appl. Mech.*, 2(1-2), pp.99-112, 2007.
- 22- M.J. Maghrebi, M. Feizabadi Farahani, **A. Zarghami**, “Linear Stability Analysis of 2D Boundary Layer Flow using Spectral Method”, *J. Technology & Education*, 1(4), pp.165-174, 2007. (Persian Language)

II) Presentation in Conferences

- 1- S. Di Francesco, **A. Zarghami**, C. Biscarini, P. Manciola, “Wall roughness effect in the lattice Boltzmann method”, 11th International Conference on Numerical Analysis and Applied Mathematics, *ICNAAM2013*, September 21-27, 2013, Rhodes, Greece.
- 2- S. Ubertini, **A. Zarghami**, G. Falcucci, R. Panciroli, M. Profiri, “Lattice Boltzmann simulation of hull slamming”, International conference on the Discrete Simulation of Fluid Dynamics, *DSFD2013*, July 19-24, 2013, Yerevan, Armenia.
- 3- **A. Zarghami**, M.J. Maghrebi, J. Ghasemi, “Analysis of Expansion Ratio in Suddenly Enlarged Flows using Lattice Boltzmann Method”, The 19th Annual/International Conference on Mechanical Engineering, *ISME2011*, May 10-12, 2011, Birjand, Iran.
- 4- **A. Zarghami**, M.H. Dibaei Bonab, “FV-LB Method: Upwind Discretization Scheme”, National Mechanical Engineering Conference, May 26, 2011, Marvdasht, Iran.
- 5- M.J. Maghrebi, **A. Zarghami**, K.Moradi, M. Farzaneh-Gord, “A Study of Spatially Growing Mixing Layer by means of Linear Stability Theory using Spectral Method”, *ICETAETS2008*, January 13-14, 2008, Coimbatore, India.
- 6- M.J. Maghrebi, H. Eazi, **A. Zarghami**, “DNS of Incompressible Plane Jet using Compact Finite Difference”, The 16th Annual/International Conference on Mechanical Engineering, *ISME2008*, May 13-15, 2008, Kerman, Iran.
- 7- K. Moradi, M. Zare Naghadehi, **A. Zarghami**, “Simulation of Natural Gas EOS (Equation of State) Investigation using PENG-ROBINSON EOS: Case Study on Iran Shanol Gas Region”, *CITICOMS2007*, August 27-29, 2007, Rajkot, India.

In accordance with the Italian Law, art. 13 D.L. 196/2003, I authorize the processing of my personal data.

