

Faculty Profile

Name: **Dr. Mahendra Shinde**

Designation : Assistant Professor

Teaching Areas: Statistical physics, Computational physics, Fundamental Physics, Classical physics/mechanics, Solid State Physics, Computer programming, Discrete element methods, Thermodynamics, Electrodynamics, Probability and Statistics, Mathematical Physics

Research Interests: Computational statistical physics of complex matter, Machine learning for fundamental and social sciences

Education: PhD, Non-equilibrium statistical physics, IIT Bombay, Mumbai, 2010
M.Sc., Solid state physics, Shivaji University, Kolhapur, Maharashtra, 1999
B.Sc., Physics, Rajaram College, Shivaji University, Kolhapur, Maharashtra, 1997



Professional Experience (Total: 9 Years & 7 Months)

1. July 2016 – Present: Assistant Professor, ICFAI Tech School, ICFAI-IFHE, Hyderabad, Telangana, India.
2. Aug 2015 – Dec 2015: Temporary faculty (Physics) , IIIT-Dharwad, Hubli, Karnataka, India.
3. Jan 2015 – July 2015: Temporary faculty (Physics), NIT Karnataka, Surathkal, Karnataka, India.
4. Oct 2013 – Dec 2014: Research Associate, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, Karnataka.
5. Jun 2012 – Jun 2013: Post-doctoral Fellow, Institute for Multiscale Simulation, FAU University, Germany
6. Jan 2011 - Jun 2012: International Young Scientist Fellow, Institute of Physics, Chinese Academy of Sciences, Beijing, China
7. Oct 2009 – Oct 2010: Post-doctoral Fellow, Hong Kong Baptist University, Hong Kong

Research / Selected Publications:

1. M. Shinde, "Spatially periodic modulated thermal convection in granular fluids: A simulation study", Powder Technology, vol. 323, 120–127, 2018
2. Y. Li, R. Liu, M. Shinde, and M. Hou, "Flux measurement in compartmentalized mono-disperse and bi-disperse granular gases", Granular Matter, vol. 14, pp. 137-143, March 2012
3. M. Shinde, D. Das, and R. Rajesh, "Coarse grained dynamics of the freely cooling granular gas in one dimension", Phys. Rev. E, vol. 84, pp. 031310(7), September 2011
4. M. Shinde, D. Das, and R. Rajesh, "Equivalence of the freely cooling granular gas to the sticky gas", Phys. Rev. E, vol. 79, pp. 021303(10), February 2009
5. M. Shinde, D. Das, and R. Rajesh, "Violation of Porod law in a freely cooling granular gas in one dimension", Phys. Rev. Lett., vol. 99, pp. 234505(4), December 2007
6. Venkateswara Rao A., Sakhare H. M., Tamhankar A. K., Shinde M. L., Gadave D. B., and Wagh P. B., "Influence of N, N-dimethylformamide additive on the physical properties of citric acid catalyzed TEOS silica aerogels", Mater. Chem. Phys., vol. 60, pp. 268-273, April 1999