

Faculty Profile



Name: Dr. MAHENDRA SHINDE

Designation : Assistant Professor

Teaching Areas: Statistical physics, Computational physics,
Fundamental Physics

Research Interests: Computational statistical physics of complex matter

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, Kolhapur, Maharashtra, 1997

Professional Experience (Total: 6 yrs& 10 months)

1. July 2016 – Present: Assistant Professor, FST, 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, no. 2, 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) V. 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