

Ashwin Joy

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Personal

Born on April 30, 1981.

India Citizen.

Education

B.Sc. Physics (First Division), St. Xaviers College, Gujarat University, 1999-2002.

M.Sc. Physics (First Division), Dept. of Physics, Gujarat University, 2002-2004.

Ph.D. Physics, Institute For Plasma Research, Gandhinagar-India, since Sep-2006.

Thesis Supervisor: R. Ganesh

Publications

Effect of external drive on strongly coupled Yukawa systems : A nonequilibrium molecular dynamics study.

Ashwin J. and R. Ganesh, *Physical Review E.* (80), 056408, (2009)

Kelvin-Helmholtz instability in strongly coupled Yukawa liquids.

Ashwin J. and R. Ganesh, *Physical Review Letters* (104), 215003, (2010)

Parallel shear flow instabilities in strongly coupled Yukawa liquids - "A comparison of generalized hydrodynamic and molecular dynamics results"

Ashwin J. and R. Ganesh, *Physics of Plasmas* (In Press)

Software design

MPMD Multi-Potential Molecular Dynamics code, a parallel MPI-based molecular dynamics code written in C for simulating Yukawa, Lennard-Jones and Carbon systems.

MPMD-PyUtils A collection of python scripts for numerical post-processing of MPMD output data.

movieGL An OpenGL-based C code to visualize the particle trajectories in real time.

Conference & Seminar Presentations

Calculation of transport coefficients using non-equilibrium molecular dynamics (NEMD).

22nd National Symposium on Plasma Science & Technology, Nov. 6-10, IPR, Gandhinagar, India.

Schools & Workshops Attended

EUIndia Grid Workshop on Material, Earth and Atmospheric Sciences at C-DAC, Pune, India from September 24-28, 2007.

Advanced School in High Performance and GRID computing at The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy from November 3-14, 2008.

Last updated: September 1, 2010