

AKSHAY PRAKASH

RESEARCH INTERESTS CFD, Hypersonic Flows, Turbulence Modeling, Algorithm Development, Parallel Computing, LBM, Multiphase Flows

EXPERIENCE Assistant Professor, Aerospace Engg., IIT Kharagpur (2016-till date)

Assistant Professor, Mechanical Engg., IIT Jodhpur (2015-2016)

Senior Scientist, Technische Universitat Graz (2013-2014)

Development of bioreactor simulator using LBM

Post Doc. Researcher, Universite Libre de Bruxelles (2012-2013)

Simulation of IFMIF target using ANSYS Fluent

Research Assistant, University of California Los Angeles (2006-2011)

Simulation of hypersonic flows, receptivity to acoustic disturbances

Research Intern, Zeus Numerix, Pune (2005)

Development of an algorithm to refine/coarsen unstructured mesh

PUBLICATIONS

- 2016: Agarwal, A., Prakash, A., “Validation of LBM based on BGK on Poiseuille’s Flow and Vortex Street in a Channel Flow”, Prof. of 4th Conference on Advances in Civil, Structural and Mechanical Engineering - ACSM 2016.
- 2014: Prakash, A., Kakarantzas, S., Bernardi, D., Micciche, G., “Hydro-thermo analysis of Li flow over IFMIF geometry”, Fusion Engineering and Design, vol. 89, no. 11, 2014.
- 2013: Prakash, A., Kakarantzas, S., Bernardi, D., Micciche, G., Massaut, V., Knaepen, B., “Numerical Simulation of IPPE Target Geometry Flows”, Fusion Engineering and Design, vol. 88, 2013.
- 2011: Prakash, A., Parsons, N., Wang, X., Zhong, X., “High-Order Shock Fitting Methods for Simulation of Hypersonic Flow with Chemical and Thermal Nonequilibrium”, vol. 230, no. 23, 2011.
- 2009: Prakash, A., Zhong, X., “Numerical Simulation of Planetary Reentry Aeroheating over Blunt Bodies with Non-Equilibrium Reacting Flow”, AIAA 2009-1542.

EDUCATION

Ph.D. University of California Los Angeles 2009-2011

MS University of California Los Angeles 2006-2009

M. Tech. IIT Bombay 2000-2005

B. Tech. IIT Bombay 2000-2005

SKILLS COMSOL, ANSYS Fluent, Tecplot, Paraview, FORTRAN, C/C++, CUDA