List of Publications

Journals

- **N. Vinod** and R. Govindarajan, "Pattern of breakdown of laminar flow into turbulent spots" Physical Review Letters, 93, 114501, 2004
- **N. Vinod** and R. Govindarajan "Instabilities and Transition in Boundary Layers", Pramana -Journal of Physics, Vol.64, No.3, 2005
- **N. Vinod** and R. Govindarajan "Signature of laminar instability in the transitional boundary layer", Journal of Turbulence, Vol. 8, pp 1-17, 2007

Papers in progress

- **N. Vinod** and R. Govindarajan "Secondary instabilities in incompressible axisymmetric boundary layers: Effect of transverse curvature", communicated to Journal of Fluid. Mech, 2008
- **N. Vinod** and G. M. Homsy "The role of Peclet number in the three-dimensional chaotic mixing inside drops." to be submitted to Phys. of Fluids.

Refereed Conferences

- **N. Vinod** and R. Govindarajan, "Stability of Axisymmetric Boundary Layers The effect of Transverse curvature", 60th *APS Meeting, Division of Fluid Mechanics*, Salt Lake City, Utah, USA, 2007.
- N. Vinod and R. Govindarajan, "Aspects of the Laminar-Turbulent Transition in Axisymmetric Boundary Layers" *Proc. 21st, International Congress of Theoretical and Applied Mechanics*, Warsaw, POLAND, 2004.
- **N. Vinod**, Hamsa Balakrishnan and R. Govindarajan, "Stability analysis of an axisymmetric boundary layer", *Proc. of 9th Asian Congress on Fluid Mechanics*, Isfahan, IRAN, 2002.
- **N. Vinod** and R. Govindarajan, "The transition zone in adverse pressure gradient boundary layers: Results from stochastic simulations" *XV International Symposium on Air Breathing Engines* Bangalore, INDIA, 2001
- **N. Vinod** and R. Govindarajan, "Axisymmetric instabilities in the boundary layer over a cylinder" *Proc. Third Natl. CFD Conf.* Bangalore, INDIA, 2001

Other conferences

R. Govindarajan, **N. Vinod** and A. Sameen, "The many routes to turbulence in shear flows" *Proc. Seventh Natl. CFD Conf.* Bangalore, INDIA, 2005

- **N. Vinod** and R. Govindarajan, "Are subtransitions in boundary layers a signature of laminar instability?" *Proc. International Symposium on Advances in Fluid Mechanics*, Bangalore, INDIA, 2003.
- R. Govindarajan and **N. Vinod** "The laminar-turbulent transition region: puzzles and progress" *Proc. Perspectives in Non-Linear Dynamics*, Chennai, INDIA 2004.