

**Symposium on Nonlinear Evolution Equation****(in honor of Professor Phoolan Prasad)**

IISc Mathematics Initiative

Department of Mathematics, Indian Institute of Science, Bangalore

**April 18 - 19, 2008**

Venue : Lecture Hall I, Department of Mathematics, IISc

Registration : 8:30 am to 9:15 am**April 18th, Friday**

Session 1 Chair: Prof. M.K. Ghosh	09:20 - 09:30		Welcome address
	09:30 - 10:30	Prof. R. Narasimha	Near surface temperature distributions: The evolution of the Ramdas layer
TEA Break (10:30 - 10:50)			
Session 2 Chair: Prof. R.N. Singh	10:50 - 11:05	Prof. Phoolan Prasad	Address
	11:05 - 11:45	Prof. M. Vanninathan	Homogenization of Periodic Structures
	11:45 - 12:25	Prof. M. Kadalbajoo	Numerical Modeling of Burgers' Equation
	12:25 - 01:05	Prof. Vasudevamurthy	On the Ananthakrishna model
LUNCH Break (1:05 - 2:00)			
Session 3 Chair: Prof. M. Vanninathan	02:00 - 02:40	Prof. R. N. Singh	Geophysical knowledge constructed from heat evolution equation
	02:40 - 03:20	Prof. Mehboob Alam	A Theory for Segregation in Vibrated Granular Materials
TEA Break (03:20 - 03:40)			
Session 4 Chair: Prof. A.S. Vasudevamurthy	03:40 - 04:20	Prof. Raghurama Rao	New Central Schemes for Hyperbolic Conservation Laws
	04:20 - 05:00	Prof. John F. Gibson	Invariant solutions and visualization of state-space dynamics in plane Couette flow
	05:00 - 05:40	Prof. D. Viswanath	Complex singularities and asymptotics of chaotic flow
April 19th, Saturday			
Session 5 Chair: Prof. G.D.V.Gowda	09:00 - 09:40	Prof. Adimurthy	Monotonization and Numerical entropy for conservation laws
	09:40 - 10:20	Prof. Sergei Pereverzyev	Adaptive Learning via the Balancing Principle
TEA Break (10:20 - 10:40)			
Session 6 Chair: Prof. S. Pereverzyev	10:40 - 11:20	Prof. G. D. V. Gowda	A finite difference scheme for a hyperbolic system of conservation laws modeling polymer flooding
	11:20 - 12:00	Prof. Premananda Bera	Importance of Non-linear terms in the momentum equation on the stability of mixed convection in a vertical porous medium channel
	12:00 - 12:40	Prof. A. K. Pani	Enhanced Oil Recovery in Reservoir Studies:Some Experimental, Theoretical and Computational Issues
LUNCH Break (12:40 - 2:00)			
Session 7 Chair: Prof. A.K. Pani	02:00 - 02:40	Prof. Sundar	Optimal Control of Film Casting Processes
	02:40 - 03:20	Prof. Baskar	A Fast Marching Method for Monotonically Propagating Fronts in an Inhomogeneous Moving Fluid
TEA Break (03:20 - 03:40)			
Session 8 Chair: Prof. S. Sundar	03:40 - 04:00	Dr. Sangeetha	
	04:00 - 04:20	Dr. Monica	
	04:20 - 04:40	Mr. Arun	Numerical modelling of hyperbolic conservation laws based on bicharacteristics
	04:40 - 05:00	Mr. Hari Shankar Gupta	