Conference on Plasma Simulations
CeNSE Auditorium; IISc Bangalore

Date:18-01-2018

9:15-9:30	Welcome Address by Prof. Arnab Rai Choudhuri

Session-1	Chair: Prof. Arnab Rai Choudhuri
9:30-10:00	**Amita Das; IPR, Gandhinagar** *The nature of complexity in plasma simulations*
10:00-10:30	**Sareswar Sharma; IPR, Gandhinagar** *Capacitively coupled discharges: An overview*
10:30-11:30	Tea +Poster Session (3rd Floor CeNSE)

Session-2	Chair: Prof. Vinod Krishan
11:30-12:00	**Amar Kakad; IIG, Mumbai** *Particle-In-Cell Simulation of the Breaking and Interaction of Multiple Coherent Wave Structures in Space Plasmas*
12:00-12:30	**Navin Dwivedi; Space Research Institute, Austria** *A Multi-Fluid Model for Escaping Atmosphere and Mg Absorption Line for WASP-12b*
12:30-01:00	**Dibyendu Nandi, IISER Kolkata** *The Solar Plasma System: Basic Understanding to Forecasting*

1:00-02:00	Lunch (3rd Floor CeNSE)

Session-3	Chair: Prof. P. Venkatakrishnan
02:00-02:30	**Piyali Chatterjee; IIA, Bangalore** *MHD simulation of eruptive phenomena in the solar corona*
02:30-03:00	**Sharanya Sur; IIA, Bangalore** *Faraday rotation measure from magnetic fields in young galaxies*
03:00-03:30	**Ramit Bhattacharyya; PRL** *Simulating the large and the small, AKA "the solar corona"*

03:30-04:30	High Tea + Poster Session (3rd Floor CeNSE)

Session-4	Chair: Prof. Siraj Hasan
04:30-05:00	**Kandaswamy Subramanian; IUCAA** *A Unified large/small-scale turbulent dynamo in stars and galaxies*
05:00-05:30	**Marc Bachet, ENS Paris** *Dynamo action by turbulence in absolute equilibrium*
05:30-06:00	**Rahul Pandit, IISc Bangalore** *Dynamo action in Taylor-Green flows near the critical Reynolds number*

07:30-09:00	Dinner (Physics Terrace)

Date: 19-01-2018

Session-1	Chair: Prof. Amita Das
9:00-09:30	**Mahendra Verma; IIT Kanpur** *Spectral simulations of fluid and MHD flows*
09:30-10:00	**Binod Sreenivisian; IISc Bangalore** *Selection of the axial dipole in rapidly rotating dynamos*
10:00-10:30	**Bhargav Vaidya; IIT Indore** *Simulating micro-physical processes in Astrophysical Plasma Flows*

10:30-11:00	Tea (CeNSE)

Session-2	Chair: Prof. Mahendra Verma
11:00-11:30	**Kowsik Bodi, IIT Bombay** *Numerical Simulation of electrically conducting fluids*
11:30-12:00	**Anuraj Panwar, JIIT Noida** *Matrix solution of coupled kinetic Alfven waves in a tokamak plasma*
12:00-12:30	**Santanu Banerjee, IPR, Gandhinagar** *Modeling of eddy current distribution and equilibrium reconstruction in tokamaks*

12:30-01:30	Lunch (3rd Floor CeNSE)

Session-3	Chair: Prof. Kandaswamy Subramanian
01:30-02:00	**Rajaraman Ganesh; IPR, Ganghinagar** *Vlasov simulations of phase space structures in a collision-less plasma*
02:00-02:30	**Kartik Patel; University of Mumbai, DAE** *A Simple Technique for Global Field Update in Parallel Particle-In-Cell Plasma Simulation*
02:30-03:00	**Animesh Kuley, IISc Bangalore** *PIC simulation of radio frequency waves in tokamak*

03:00-03:30	Tea (CeNSE)

Session-4	Chair: Prof. Kartik Patel
03:30-04:00	**Sudip Sengupta; IPR Gandhinagar** *Particle-in-cell Simulation of Buneman Instability*
04:00-04:30	**Vikrant Saxena; IPR Gandhinagar** *Modeling X-ray irradiation of rare gas clusters*
04:30-05:00	**Gursharan Singh; DAE Vizagbhabha** *Radio Frequency Quarderpole Simulations*

POSTER SESSION (3rd Floor CeNSE)

Time Slot	List
10:30-11:30 03:30-04:30	**1. Roopendra Singh Rajawat; IPR; Gandhinagar** *Excitation of coupled hole-solitons during nonlinear evolution of Buneman instability* **2. Deep Kumar Kuri; Tezpur University** *Effect of magnetic field on proton acceleration from overdense plasmas* **3. Atul Kumar; IPR, Gandhinagar** *Effect of finite beam width on current separation in beam plasma system: Particle-in-Cell simulations* **4. Ekta Agrawal; University of Lucknow** *Simulation study of wakefields driven by Gaussian laser pulses propagating in homogeneous plasma* **5. Ajay Lotekar; IIG Mumbai** *A New 1D Fluid Code for the Modeling of Plasma Wave Processes in Superthermal Plasmas* **6. Rupak Mukherjee; IPR Gandhinagar** *A New Three Dimensional Pseudo-Spectral Compressible Magnetohydrodynamic GPU Code for Astro-plasma Simulations*
10:30-11:30 03:30-04:30	**7. Roshan Samuel; IIT Kanpur** **8. Soumyaranjan Dash; IISER Kolkata** *A Magnetofrictional Approach to Modeling the Solar Corona* **9. Gopal Hazra; IISC Bangalore** *A theoretical model of the variation of the meridional circulation with the solar cycle* **10. Prasun Dhang; IISc Bangalore** *Global MHD simulations of accretion flows: Convergence and role of azimuthal extent* **11. Prasanta Bera; IUCAA** *A perturbation study of strongly magnetized white dwarfs* **12. Tushar Mondal, IISc Bangalore** *Magnetized advective accretion flow: formation of magnetic barriers in magnetically arrested disc* **13. Bindesh Tripathi; IISER Kolkata** *Modeling Grand Minima Using Hysteresis in A Time Delay Solar Dynamo Model* **14. Bidya Binay Karak, IIA** *Consequences of high effective Prandtl number on solar differential rotation and convective velocity* **15. Soham Setua, IISc** *Complex boundary separating the dynamo and no-dynamo regimes in Taylor-Green Flows*

	16. Siddhartha Gupta, RRI *On the well-posedness of the two-fluid equations for cosmic rays and a thermal plasma* 17. **Banibrata Mukhopadhyay, IISc** *Super-Chandrasekhar limiting mass white dwarfs: Its current status after the theoretical discovery in 2012*