Star and Planet Formation: Insights and Intricacies

5 – 7 December 2016

IIST, Thiruvananthapuram

Scientific Program

Time Slot	5th December 2016 - Program Details
10:00 – 10:30	**Registration + Inauguration**
10:30 – 11:00	**Tea**
11:00 – 11:45	**Plenary Talk – Current and Upcoming Facilities in India for Star Formation Studies – Swarna K Ghosh, NCRA, Pune**
Session 1 - Interstellar Medium, Molecular Clouds and Astrochemistry (Chair – Padmakar Parihar)	
11:45 – 12:05	Formation of carbonchains and hydrocarbons in DR21(OH): Is it WCCC? Bhaswati Mookerjea, TIFR, Mumbai
12:05 – 12:35	Magnetic field maps of star forming regions using polarimetry Maheswar Gopinathan, ARIES, Nainital
12:35 – 12:55	Star Formation and its progress in Serpens Priya Hasan, Maulana Azad National Urdu University, Hyderabad
12:55 – 13:05	Study of molecular clouds in UDGs via Doppler effect Ritu Vyaghrambare, Osmania University, Hyderabad
13:05 – 13:15	Optical polarimetry and molecular line studies of L1157 molecular cloud Ekta Sharma, ARIES, Nainital
13:15 – 13:25	Star Formation Activity in the IRDC G333.73+0.37 Veena VS, IIST, Trivandrum
13:25 – 14:30	**Lunch**
Session 2 - Clusters, Young Stellar Objects, Eruptive Variables, Lowmass Stars and Outflows (Chair – Rukmini J)	
14:30 – 14:50	Exploring YSO's of Orion Nebula Cluster Padmakar Parihar, IIA, Bangalore
14:50 – 15:10	Investigation of open cluster to probe the galactic structure in the solar neighbourhood Yogesh C Joshi, ARIES, Nainital
15:10 – 15:30	Young stellar outflows: A journey from dynamical to synthetic models Bhargav Vaidya, University of Torino, Italy

15:30 – 15:50	Optical and NIR observations of eruptive young stars Umanath Kamath, IIA, Bangalore
15:50 – 16:20	**Tea+ Poster Viewing**
16:20 – 16:40	Near-infrared monitoring of FU Orionis type object 2MASS J06593158-0405277 NM Ashok, PRL, Ahmedabad
16:40 – 17:00	Understanding of rapid rotations in very low mass stars and brown dwarfs Soumen Mondal, S. N. Bose National Centre for Basic Sciences
17:00 – 17:10	Proper motion study of star clusters Gaurav Singh, ARIES, Nainital
17:10 – 17:20	Variability of young stellar objects in star forming regions Tirthendu Sinha, ARIES, Nainital
17:20 – 17:30	Highly embedded protostar in SFO 18: IRSA 05417+0907 Piyali Saha, ARIES, Nainital
17:30 – 17:35	Star cluster detection using probability density estimation Soumyadeep Das, IIT (BHU), Varanasi
17:35 – 18:00	**Tea+ Poster Viewing**
Session 3 - Extragalactic Star Formation (Chair – Soumen Mondal)	
18:00 – 18:15	Star clusters in the Magellanic Clouds - I. Parametrization and classification of 1072 clusters in the LMC Prasanta Kumar Nayak, IIA, Bangalore
18:15 – 18:30	Age-dating, mass function and star formation history in the extended outer disk of NGC 300 Chayan Mondal, IIA, Bangalore
18:30 – 18:35	Exploring Star Formation in Ring Galaxies Ashish Devaraj, IIST, Trivandrum
19:30 onwards	**Dinner**

Time Slot	6th December 2016 - Program Details
10:30 – 11:15	**Plenary Talk – Overview of Star Formation – DK Ojha, TIFR, Mumbai**
Session 4 - High-mass Star Formation (Chair – Bhaswati Mookerjea)	
11:15 – 11:45	**Tea + Poster Viewing**
11:45 – 12:05	Star formation in NGC 7538 H II region Saurabh Sharma, ARIES, Nainital
12:05 – 12:25	Observational study of massive star-forming regions W42 and IRAS 17599-2148 Lokesh Dewangan, PRL, Ahmedabad
12:25 – 12:45	Evidence for dynamically important magnetic fields on massive star and cluster formation Eswaraiah Chakali, Institute of Astronomy, National Tsing Hua University
12:45 – 13:05	Dust and gas environment of the massive protostellar object in IRAS 18511+0146 Sarita Vig, IIST, Trivandrum
13:05 – 13:25	Colliding clouds: A potential mechanism to form massive stars Tapas Baug, TIFR, Mumbai
13:25 – 14:30	**Lunch**
14:30 – 14:50	Impact of environment dependence of massive star formation on our inferences regarding star formation Indulekha K, MGU, Kottayam
14:50 – 15:00	Stellar populations and the star formation histories of distant Galactic H II regions Somnath Dutta, S. N. Bose National Centre for Basic Sciences
15:00 – 15:10	High-mass star formation toward southern infrared bubble S10 Swagat Ranjan Das, IIST, Trivandrum
15:10 – 15:20	Young stellar population and star formation activity in the W4 H II region Neelam Panwar, University of Delhi
15:20 – 15:50	Fragmentation of cold massive dust clumps Jagadheep D, IIST, Trivandrum
15:50 – 16:10	Understanding the star forming cloud associated with IRAS 20286+4105 Anandmayee Tej, IIST, Trivandrum
16:10 – 16:40	**Tea + Poster Viewing**
16:40 – 16:50	Ongoing star-formation and stellar evolution in the active H II region Sh2-242 Alik Panja, S. N. Bose National Centre for Basic Sciences
16:50 – 17:00	Probing early phases of high mass star formation Sonu Tabitha, IIST, Trivandrum
17:00 – 17:10	Probing the shock excited emissions from EGOs Namitha Issac, IIST, Trivandrum
17:10 – 17:15	Studies of bubble N123 Karthika V, IIST, Trivandrum
17:15 – 18:15	**Discussion on Collaboration, future missions**
18:15 – 18:40	**Tea + Poster Viewing**
18:40 – 19:30	**Discussion on Collaboration, future missions**
19:30 onwards	**Dinner**

Time Slot	7th December 2016 - Program Details
10:00 – 10:45	**Plenary Talk – Protoplanetary Disks and Planet Formation – Manoj Puravankara, TIFR, Mumbai**
Session 5 - Protoplanetary disks and Planet Formation (Chair – Saurabh Sharma)	
10:45 – 11:05	PDS 11: a nearby, >10 Myr old hierarchical triple system of classical T Tauri stars Blesson Mathew, TIFR, Mumbai
11:05 – 11:30	**Tea + Poster Viewing**
11:30 – 11:50	Photometric studies of four eclipsing binaries from Kepler database J Rukmini, Osmania University, Hyderabad
11:50 – 12:00	Exploring disc accretion process in young 'T Tauri' star 'DF Tau' Parvej Reja Saleh, Gauhati University, Gauhati
12:00 – 12:10	Automated parametrization of Cool Stars Kaushal, University of Delhi
12:10 – 12:20	A Discussion on T-tauri protoplanetary disks and modelling of planet formation Jishnu Das, Osmania University, Hyderabad
12:20 – 12:30	Comparative analysis of X-ray emission from T Tauri stars and Herbig Ae/Be stars Mahathi Chavali, Manipal Institute of Technology
12:30 – 12:40	The dust composition of transitional disks in the Taurus star forming region Mayank Narang, TIFR, Mumbai
12:40 – 12:45	OI lines in Herbig Ae/Be stars Pratheeksha Nayak, IIST, Trivandrum
12:45 – 12:55	The early thermal evolution and differentiation of Mercury into a large iron core Gurpreet Kaur Bhatia, Panjab University, Chandigarh
12:55 – 13:30	**Concluding Remarks**
13:30 – 14:30	**Lunch**