

Schedule:- Star Formation Studies in India (SF2024)

Venue: Silver Jubilee Hall, SNBNCBS

IT: Invited Talk (15+5 min), CT: Contributed Talk (10+5 min)

Day 1: Monday, 08 January 2024

09:30–09:35	Welcome Address		
09:35–09:45	Opening Remark by Director, SNBNCBS		
09:45–09:55	Welcome Remark by SOC Chair		
Session I: Star-forming Filaments			
Chairs: Sarita Vig and Santosh Joshi			
10:00–10:20	IT	Devendra K. Ojha TIFR, Mumbai	Disk-mediated accretion bursts in low- and high-mass young stellar objects
10:20–10:40	IT	Saurabh Sharma ARIES, Nainital	Role of filaments in the formation of stars in the NGC 2316 star cluster
10:40–10:55	CT	Veena V S MPIfR, Germany	Star Formation in Extreme Environments: A 200 pc High Velocity Cloud in the Galactic Centre
10:55–11:45	Group Photo + Poster Viewing + Tea Break		
11:45–12:00	CT	Kshitiz Mallick ARIES, Nainital	Exploring High-mass star formation at the junction of filaments in Sh2-112
12:00–12:15	CT	Jyotirmoy Dey IIST, Thiruvananthapuram	G18.148–0.283: a case study of the cloud-cloud collisions as a mechanism for high-mass star formation
12:15–12:30	CT	Arup Kumar Maity PRL, Ahmedabad	Origin of Hub-Filament Systems through Cloud-Cloud Collision
12:30–12:45	CT	Sonu Tabitha Paulson TIFR, Mumbai	Investigating the Earliest Stages of High-Mass Star Formation
12:45–13:00	CT	Arun Seshadri IIST, Thiruvananthapuram	Multiwavelength investigation of the star-forming complex G12.79+0.43
13:00–14:15	Lunch at Basundhara Building		
Session II: Interstellar Medium and Feedback			
Chairs: Neelam Panwar and Lokesh Dewangan			
14:15–14:35	IT	Bhaswati Mookerjea TIFR, Mumbai	PDRs: The irradiated neutral ISM
14:35–14:55	IT	Maheswar Gopinathan IIA, Bengaluru	Rocket effect in molecular clouds near O-type stars
14:55–15:10	CT	Nirupam Roy IISc, Bangalore	Fire burn and cauldron bubble: Missing supernova remnants and prospect of detecting them at low radio frequency
15:10–15:25	CT	Mridusmita Buragohain University of Hyderabad	Observational search of PAHs footprints using SUBARU/COMICS telescope

15:25–15:40	CT	Aayushi Verma ARIES, Nainital	Exploring Stellar Cluster and Feedback-driven Star Formation in the Galactic Midinfrared Bubble [HKS2019] E70
15:40–15:55	CT	Sudeshna Patra IISER Tirupati	The role of metallicity on the mass-luminosity conversion factor derived from dense gas
15:55–16:25	Tea Break		
Session III: Planet formation and Exoplanets			
Chair: Anandamayee Tej			
16:25–16:45	IT	Abhijit Chakraborty PRL, Ahmedabad	Discovery of two exoplanets with extreme densities with PARAS: TOI4603b and TOI1789b
16:45–17:05	IT	Jessy Jose IISER, Tirupathi	Proto-planetary disk evolution: Role of external factors
17:05–17:25	IT	Liton Majumdar NISER, Bhubaneswar	Constraining the initial conditions for the formation of extra-solar planets and their atmospheres
17:25–17:40	CT	Swastik Chowbay IIA, Bengaluru	The Search for Planet around LkCa 15 protoplanetary disk
20:00–21:30	Dinner at Basundhara Building		
End of Day 1			

Day 2: Tuesday, 09 January 2024

Session IV. Star formation at high resolution			
Chairs: Bhaswati Mookerjea and Maheswar Gopinathan			
09:30–09:50	IT	Anandamayee Tej IIST, Thiruvananthapuram	Perspectives on high-mass star formation: Results from the ATOMS survey
09:50–10:10	IT	Lokesh Dewangan PRL, Ahmedabad	Unearthing the hidden structures in star-forming regions: Results from JWST
10:10–10:30	IT	Manoj P. TIFR, Mumbai	Investigating Protostellar Accretion and Outflow: JWST NIRSpec and MIRI IFU Mapping of Young Protostars Across the Mass Spectrum
10:30–10:50	IT	Jagadheep Pandian IIST, Thiruvananthapuram	The physics of high-mass star formation: a fragmentation study of ATLASGAL dust clumps
10:50–12:15	Poster Viewing + Tea Break		
12:20–12:40	IT	Somnath Dutta Academia Sinica, Taiwan	Episodic Accretion in Protostars - An ALMA Survey of Molecular Jets in the Orion Molecular Cloud
12:40–12:55	CT	Sabyasachi Pal Midnapore City College	Study of possible glycine precursor molecules towards the hot molecular core G10.47+0.03
12:55–13:10	CT	Anindya Saha IIST, Thiruvananthapuram	Study of fragmentation and multiscale gas dynamics in two protoclusters with ALMA
13:10–14:15	Lunch Break at Basundhara Building		

14:15–14:30	CT	Naval Kishor Bhadari PRL, Ahmedabad	Dynamics of the inner environment of a hub-filament system hosting massive young stellar object W42-MME
14:30–14:45	CT	Arijit Manna Midnapore City College	Detection of phosphorus nitride and other complex organic molecules towards the high-mass protostar IRAS 18089–1732
Session V. Instrumentation			
Chair: Sreeja S Kartha			
14:45–15:05	IT	Joe P. Ninan TIFR, Mumbai	Pushing the boundaries of star and planet formation by developing new spectrographs
15:05–15:20	CT	Arun Surya IIA, Bengaluru	Design advancement of MOIS : A configurable slit multi-object infrared spectrograph and wide field imager
15:20–15:35	CT	Supriyo Ghosh U. of Hertfordshire, UK	An actively controlled fibre-fed optical spectrograph EXOhSPEC
15:35–16:00	Tea Break		
16:00–17:15	Bose Colloquium by Prof. Dipankar Banerjee		
19:30–21:30	Conference Dinner at Stadel		
End of Day 2			

Day 3: Wednesday, 10 January 2024

Session VI. Pre-main Sequence Stars and Variability			
Chair: Mousumi Das			
09:30–09:50	IT	Sarita Vig IIST, Thiruvananthapuram	Non-thermal emission from massive protostellar jets
09:50–10:05	CT	Arpan Ghosh ARIES, Nainital	Monitoring of episodically accreting Young Stellar Objects
10:05–10:20	CT	Shridharan Baskaran CHRIST U., Bangalore	Disentangling the two sub-populations of early Herbig Be stars using VLT/X-shooter spectra
10:20–10:35	CT	Nidhi Sabu CHRIST U., Bangalore	Evaluation of varying mass accretion rate with mass in PMS stars
10:35–11:45	Poster Viewing + Tea Break		
Session VII. Stellar clusters			
Chair: Blesson Mathew			
11:45–12:05	IT	Yogesh Joshi ARIES, Nainital	Photometric, kinematic and variability study in the young and intermediate-age open clusters
12:05–12:25	IT	Manash R. Samal PRL, Ahmedabad	Formation and early evolution of star clusters: the case of FSR 655 and NGC 2516

12:25–12:45	IT	Neelam Panwar ARIES, Nainital	Multi-wavelength Studies of Young Star Clusters and HII regions
12:45–13:00	CT	Ranjan Kumar PRL, Ahmedabad	An investigation of the formation channels of blue straggler stars in the Galactic globular cluster M68
13:00–13:15	CT	Harmeen Kaur Kumaun U., Nainital	Structural morphology and star formation scenario in young star clusters
13:15–14:30	Lunch Break		
14:30–19:00	Open for City Tour (Personal)		
20:00–21:30	Dinner at Basundhara Building		
End of Day 3			

Day 4: Thursday, 11 January 2024

Session VIII. Magnetic fields in star-forming regions			
Chair: Jessy Jose			
09:30–09:50	IT	Eswariah Chakali IISER, Tirupathi	The interplay between magnetic fields, turbulence, and gravity and its significance
09:50–10:05	CT	Piyali Saha NAOJ, Japan	Magnetic Fields in Massive Star-forming Regions (MagMaR) unveiled by ALMA
10:05–10:20	CT	Ram Kesh Yadav NARIT, Thailand	Witnessing Star Formation in Galactic Bubble and Filamentary Systems
10:20–10:50	Tea Break		
Session IX. Extra-galactic star formation			
Chair: Soumen Mondal			
10:50–11:10	IT	Mousumi Das IIA, Bengaluru	The Rules of Star formation in Galaxies : from Small Scales to Large Complexes
11:10–11:30	IT	Sreeja S Kartha CHRIST, Bengaluru	Harmony of the Cosmos: unveiling the interwoven threads of star formation and galactic evolution in secular and environmental contexts
11:30–11:45	CT	Ananta Charan Pradhan NIT, Rourkela	Tracing star formation in void and filament galaxies
11:45–12:00	CT	Susmita Barman University of Hyderabad	Effect of high-mass stars on the properties of ISM in N44 of the LMC
12:00–12:15	CT	Souvik Manna SNBNCBS, Kolkata	Observation of Radio Continuum Halos of 8 Nearby Large Galaxies using uGMRT
12:15–13:00	Discussion and Conclusion of the conference; Chair: Devendra K. Ojha		
13:00–14:30	Lunch Break		
End of the conference			