

Time	PROGRAMME SCHEDULE OF 'ADVANCES IN RELATIVISTIC ASTROPHYSICS' (AReA)	
<b>02-11-2023</b>		
9:00-9:15	Inauguration	Welcome address by Director ARIES.
Session: Black Holes - I; Chair: Santabrata Das		
9:15-9:45	Samir Mandal	Accretion Flows Around Black Holes: Unveiling the Cosmic Powerhouses
9:45-10:15	Bhupendra Mishra	Misaligned circum-single disks embedded in an AGN disk
10:15-10:30	Bhuvana G.R	Exploring the accretion disc dynamics in extragalactic black hole X-ray binaries
10:30-10:45	Priyesh Kumar Tripathi	Effect of the fluid composition on the Bondi-Hoyle accretion flow
10:45-11:30	High Tea & Posters	
11:30-11:50	Shilpa Sarkar	Signature of compact objects on accretion flow and emission spectrum
11:50-12:10	Indu Kalpa Dhingia	High-soft to low-hard state transition in black hole X-ray binaries with GRMHD simulations
12:10-12:25	Sanjit Debnath	Oscillating shocks in the transonic viscous, variable $\Gamma$ accretion flows around black holes
12:25-12:40	Camelia Jana	Mass loss from relativistic magnetized accretion disc around rotating black holes
12:40-12:55	Seshadri Majumder	A deeper insight into the accretion scenario of BH-ULXs with XMM-Newton
13:00-14:00	Lunch	
SPECIAL SESSION: Commemorating the great Prof. Amal K. Raychaudhuri (ARR); Chair Gopakumar A.		
14:00-14:50	Narayan Banerjee	The Raychaudhuri Equation: Its Genesis and Significance
14:50-15:20	Tea & Poster	
Session: Black holes - II; Chair: Indranil Chattopadhyay		
15:20-15:50	Sudip K. Garain	General Relativistic Hydrodynamic Simulations around Accreting Black Holes
15:50-16:10	Rajiv Kumar	Study of accretion disks around black holes with two types of gas inflows
Session: Jet ; Chair: Samir Mandal		
16:10-16:40	Dipanjana Mukherjee	The role of relativistic jets in galaxy evolution
16:40-17:10	Bhargav Vaidya	Decoding the role of instabilities in shaping the dynamics of AGN jets and its subsequent feedback on cluster scales.
17:10-17:30	Raj Kishor Joshi	Numerical Simulations of Relativistic Radiatively driven Jets
<b>03-11-2023</b>		
Session- AGN; Chair: Bhargav Vaidya		
9:30-10:00	Ritaban Chatterjee	Moderate Correlation between the Accretion Disk and Jet Power in a Large Sample of Fermi Blazars
10:00-10:30	Stalin C. S.	The central regions of AGN: Clues from X-ray polarimetry
10:30-10:50	Shivangi Pandey	Deciphering the Mass Measurement Odyssey of Intermediate mass black hole NGC 4395 : The Enigma Unveiled?
10:50-11:20	Tea & Posters	
Session- AGN; Chair: Dipanjana Mukherjee		
11:20-11:50	Suvendu Rakshit	Supermassive Black Hole Masses in Highly Luminous Active Galactic Nuclei
11:50-12:20	Vaidehi S. Paliya	The Central Engines of Fermi Blazars
12:20-12:35	Arijit Sar	Modeling the UV/X-ray variability and time delay in the narrow-line Seyfert 1 galaxy Mkn 493
12:35-12:50	Habib Ahammad Mondal	Long-term study of the intermittent extreme behaviour of the EHLB IES 2344+514
13:00-14:00	Lunch	
Session- Spectral & polarimetric Studies; Chair: Bhal Chandra Joshi		
14:00-14:30	Dipankar Bhattacharya	The emerging era of spectro-polarimetry at high energies
14:30-14:50	Ankur Kushwaha	Polarized emission of Black holes: Measurements and predictions
14:50-15:05	Rwitika Chatterjee	Probing the physics of Neutron Stars using X-ray Polarimetry
15:05-15:35	Tea & Posters	
Session- Multi-messenger Astronomy; Chair: Narayan Banerjee		
15:35-16:05	Pratik Majumdar	Multimessenger Astroparticle Physics with photons and Neutrinos
16:05-16:25	Vidushi Sharma	Multimessenger Astronomy with General Coordinates Network and Short GRBs
DIRECTOR'S DINNER		
<b>04-11-2023</b>		
Session: Neutron Stars; Chair: Ritaban Chatterjee		
9:15-9:45	Bhal Chandra Joshi	Recent results and future prospects : the Indian Pulsar Timing Array experiment
9:45-10:15	A Gopakumar	Prospects of persistent multi-messenger nano-hertz GW astronomy
10:15-10:40	Aru Beri	Fast Timing and Broadband look at Neutron Star X-ray Binaries - Discovery of an Accreting Millisecond X-ray Pulsar
10:40-10:55	Niranjan A	Accretion onto strongly magnetized misaligned neutron stars
10:55-11:30	Tea & Posters	
11:30-12:00	Sudip Bhattacharyya	The permanent ellipticity of a millisecond pulsar
12:00-12:25	Manomeeta Chakraborty	Investigation of neutron star low-mass X-ray binaries in the high luminosity regime
Session: GRB; Chair: Kuntal Mishra		
12:25-12:55	Amit Shukla	Gega-electronvolt emission from binary neutron star merger
13:00-14:00	Lunch	
Session: GRB; Chair: Kuntal Mishra		
14:00-14:30	Shabnam Iyyani	Onset of Particle Acceleration during the Prompt Phase in a Gamma-Ray Burst
14:30-14:50	Mukesh Vyas	Photon scattering in a relativistic outflow having velocity shear: a novel mechanism of producing high energy power-law spectra
14:50-15:05	Dimple Panchal	Insights into the properties of GRBs with VHE emission
15:05-15:35	Tea & Posters	
15:35-16:05	Jagdish Joshi	Very high-energy gamma rays from GRB afterglows: Implications for radiative models
16:05-16:20	Rahul Gupta	Exploring Dark Gamma-ray Bursts the case of GRB 150309A
16:20-16:35	Ankur Ghosh	Search for the late-time merger ejecta emission in short GRBs
16:35-17:15	DISCUSSION ON FUTURE PROSPECT AND CONCLUSION OF THE CONFERENCE	