

# Scientific Program of ICGC-2023

## Oral Sessions

Time	Name	Title of the talk
<b>6 December 2023 (Day-1)</b>		
09.30-10:00	<b>Inauguration (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
<b>Plenary Session-1 (10:00-10:45, Day-1 Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Sayan Kar</a>		
10:00-10:45	<a href="#">REZZOLLA, Luciano</a>	Binary Neutron Stars: from macroscopic collisions to microphysics
10:45-11:15	<b>Tea Break</b>	
<b>Plenary Session-2 (11:15-12:45, Day-1, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Urjit Yajnik</a>		
11:15-12:00	<a href="#">PARIKH, Maulik</a>	Free-falling in Quantum Spacetime
12:00-12:45	<a href="#">SACHDEV, Surabhi</a>	LIGO observations and future with LIGO India
12:45-14:15	<b>Lunch Break</b>	
<b>Workshop on Astrophysical Relativity (14:15-16:30, Day-1, Venue: 5006)</b>		
Session Chairs: <a href="#">Indranil Chattopadhyay</a> and <a href="#">Arunava Mukherjee</a>		
14:15-14:45	<a href="#">NANDI, Anuj</a>	AstroSat - Indian Space-based Multi-wavelength Observatory (Invited Talk)
14:45-15:00	<a href="#">BERI, Aru</a>	Accreting Millisecond X-ray Pulsars: Probing Strong Field Gravity
15:00-15:15	<a href="#">MISHRA, Bhupendra</a>	Misaligned circum-single disks embedded in an AGN disk
15:15-15:30	<a href="#">JANA, Camelia</a>	Mass loss from relativistic magnetized accretion disc around rotating black holes
15:30-15:45	<a href="#">MANDAL, Samir</a>	Probing the Accretion/Ejection Geometry of X-ray Binaries Using Spectro-Polarimetry Study
15:45-16:00	<a href="#">HOSSAIN, Golam Mortuza</a>	Equation of states in the curved spacetime of compact stars and their effects on tidal deformability
16:00-16:15	<a href="#">VERMA, HIMANSHU</a>	Microlensing Black Hole Shadows
16:15-16:30	<a href="#">DIHINGIA, Indu Kalpa</a>	High-soft to low-hard state transition in black hole X-ray binaries with GRMHD simulations

Time	Name	Title of the talk
<b>Workshop on Classical &amp; Quantum Gravity (14:15-16:30, Day-1)</b>		
Session Chairs: <a href="#">Kinjalk Lochan</a> and <a href="#">Swapna Mahapatra</a>		
14:15-14:45	<a href="#">KAR, Sayan</a>	Regular spacetimes: black holes, wormholes and bubbles (Invited talk, <b>Venue: 5004</b> )
<b>Session-1 (Venue: 5004)</b>		
14:45-15:00	<a href="#">JHA, Abhishek</a>	Influence of gravity on the quantum speed limit in neutrino oscillations
15:00-15:15	<a href="#">KAR, Anjan</a>	New regular black holes: geometry, matter sources and shadow profiles
15:15-15:30	<a href="#">NARANG, Ashish</a>	Gravitational radiation from binary systems in $f(R)$ gravity: A semi-classical approach
15:30-15:45	<a href="#">KAKKAR, ASTHA</a>	Phases of scalar and fermionic field theories in thermal Anti-de Sitter Spaces
15:45-16:00	<a href="#">CHATTERJEE, Ayan</a>	Effective quantum states for trapped surfaces
16:00-16:15	<a href="#">DUTTA, Ayanendu</a>	Particle dynamics and new horizon structure around Kerr-Newman singularity
16:15-16:30	<a href="#">LOTTE, BALJEET KAUR</a>	Energetics of a self-gravitating quantum system of charged particles
<b>Session-2 (Venue: 5003)</b>		
14:45-15:00	<a href="#">BAISHYA, Banashree</a>	Pole-skipping in holography with scalar-Gauss-Bonnet coupling
15:00-15:15	<a href="#">PAUL, Bikash Chandra</a>	Singularity free Emergent Universe from Dynamical wormhole
15:15-15:30	<a href="#">SINGHA, Chiranjeeb</a>	Thermodynamics of multi-horizon spacetimes
15:30-15:45	<a href="#">CHAKRABORTY, Dibya</a>	The Conspiracy of dS Space in String Theory (?)
15:45-16:00	<a href="#">PARAI, Diganta</a>	An analytical approach to compute conductivity of p-wave holographic superconductors
16:00-16:15	<a href="#">BARMAN, Dipankar</a>	Are multiple reflecting boundaries capable of enhancing entanglement harvesting?
16:16-16:30	<a href="#">BARMAN, Subhajt</a>	Radiative processes of single and entangled detectors on circular trajectories in (2+1) dimensional Minkowski spacetime

Time	Name	Title of the talk
<b>Workshop on Cosmology (14:15-16:30, Day-1)</b>		
Session Chairs: <a href="#">Pravabati Chingangbam</a> and <a href="#">Girish Kulkarni</a>		
14:15-14:45	<a href="#">PADMANABHAN, Hamsa</a>	Mapping the baryonic Universe: a new window into the cosmos (Invited Talk, <b>Venue: 5002</b> )
<b>Session-1 (Venue: 5002)</b>		
14:45-15:00	<a href="#">TALUKDAR, ABHIJIT</a>	Using Big Bang Nucleosynthesis to constrain $f(R)$ gravity scalarons and primordial black hole masses
15:00-15:15	<a href="#">VERMA, ANSHUL</a>	Exploring Cosmic Anisotropy in the Bianchi-I Cosmological Model
15:15-15:30	<a href="#">BHAUMIK, Arko</a>	Detectable signatures of non-Bunch-Davies 3-point correlation from primordial magnetic fields: CMB $\mu$ T spectrum
15:30-15:45	<a href="#">MEENA, Ashish Kumar</a>	Extremely magnified stars in cluster lenses
15:45-16:00	<a href="#">KUSHWAHA, Ashu</a>	An effective field theory approach to understand the primordial magnetogenesis
16:00-16:15	<a href="#">CHATTERJEE, Atrideb</a>	Ruling out Strongly Interacting Dark Matter–Dark Radiation Models from Joint Observations of Cosmic Microwave Background and Quasar Absorption Spectra
16:15-16:30	<a href="#">CHAKRABORTY, Ayan</a>	Squeezing, Chaos and Thermalization in Periodically Driven Quantum Systems: The Case of Bosonic Preheating
<b>Session-2 (Venue: 5001)</b>		
14:45-15:00	<a href="#">DAVE, Bihag</a>	Self-interactions of ULDM to the rescue?
15:00-15:15	<a href="#">DINDA, Bikash Ranjan</a>	Model-independent reconstruction of the evolution of dark energy using Gaussian process regression
15:15-15:30	<a href="#">MURMU, Chandra Shekhar</a>	Probing the signatures of astrophysical scatter in the EoR 21cm signal using auto-bispectrum
15:30-15:45	<a href="#">PAUL, Debarun</a>	Effects of Z3 symmetric dark matter models on global 21-cm signal
15:45-16:00	<a href="#">CHOWDHURY, Debika</a>	Dark energy, D-branes, and Pulsar Timing Arrays
16:00-16:15	<a href="#">G, Dipanshu</a>	Statistical Approaches to Study statistical Isotropy in CMB Sky maps
16:15-16:30	<a href="#">MUKHERJEE, Dipayan</a>	Expansion-collapse duality between Einstein and Jordan frames: Implications at quantum level

Time	Name	Title of the talk
<b>Workshop on Gravitational Waves (14:15-16:30, Day-1, Venue: 5005)</b>		
Session Chairs : <a href="#">Sukanta Bose</a> and <a href="#">Parameswaran Ajith</a>		
14:15-14:45	<a href="#">VENUMADHAV, Tejaswi</a>	New black hole mergers in LVK data from a gravitational wave search including higher-order harmonics (Invited Talk)
14:45-15:00	<a href="#">CHOWDARY, Alapati Tharaka Rama</a>	Quasinormal Modes of Slowly Rotating Black Holes in Dynamical Chern-Simons Gravity up to Second Order in Spin
15:00-15:15	<a href="#">SRIVASTAVA, Aman</a>	Noise analysis of the Indian Pulsar Timing Array data release I
15:15-15:30	<a href="#">MILLER, Andrew</a>	Novel probes of dark matter with continuous gravitational waves
15:30-15:45	<a href="#">PALADI, Avinash Kumar</a>	Multi-band Extension of the Wideband Timing Technique
15:45-16:00	<a href="#">TIWARI, AVINASH</a>	Probing globular clusters and other astrophysical environments with gravitational waves emitted by accelerated compact binary mergers
16:00-16:15	<a href="#">BISWAS, Bhaskar</a>	A Bayesian investigation of the neutron star equation-of-state vs. gravity degeneracy
16:15-16:30	<a href="#">GUHA ROY, Debanjan</a>	Analysing the sensitivity of nuclear equation of state parameters with stellar observables using f-modes oscillations in Neutron Stars
16:30-17:00	<b>Tea Break</b>	
17:00-18:00	<b>Poster Session (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
<b>Special Sessions: Prof. Padmanabhan's Memorial Session (18:00-19:30, Day-1)</b>		
<b>Venue: Dr. Bhupen Hazarika Auditorium</b>		
Sessions Chairs: <a href="#">S. Shankaranarayanan</a> and <a href="#">Jasjeet Singh Bagla</a>		
18:00-18:05	<a href="#">BAGLA, Jasjeet Singh and Shankaranarayanan, S.</a>	Introduction
18:05-18:30	<a href="#">Jassal, Harvinder K</a>	Cosmology ( $\hbar=0$ )
18:30-19:00	<a href="#">LOCHAN, KINJALK</a>	Quantum Gravity ( $\hbar=1$ )
19:00-19:30	<a href="#">SARKAR, Sudipta</a>	Induced Gravity ( $\hbar=1$ to $\hbar=0$ )
19:45-21:30	<b>Dinner</b>	

Time	Name	Title of the talk
<b>7 December 2023 (Day-2)</b>		
<b>Plenary Session-1 (9:30-11:00, Day-2, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Anjan Ananda Sen</a>		
09:30-10:15	<a href="#">JOSHI, Bhal Chandra</a>	Ultra-long wavelength gravitational waves with pulsar timing array
10:15-11:00	<a href="#">PARANJAPE, Aseem</a>	Theoretical developments in modeling cosmological structure formation
11:00-11:30	<b>Tea Break</b>	
<b>Plenary Session-2 (11:30-13:00, Day-2, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">S. Shankaranarayanan</a>		
11:30-12:15	<a href="#">RAJA, Sendhil</a>	Gravitational Wave Detectors (India): Present status & future plans
12:15-13:00	<a href="#">DAYAL, Pratika</a>	Hunting for gravitational waves in the era of cosmic dawn
13:00-14:30	<b>Lunch Break</b>	
<b>Workshop on Astrophysical Relativity (14:30 - 16:00, Day-2, Venue: 5006)</b>		
Session Chairs: <a href="#">Arunava Mukherjee</a> and <a href="#">Indranil Chattopadhyay</a>		
14:30-14:45	<a href="#">P J, JOSEPH</a>	Testing the equivalence principle with Blackhole image observations
14:45-15:00	<a href="#">DEBNATH, Jyotijwal</a>	The light bending phenomenon for a pulsar-black hole binary
15:00-15:15	<a href="#">SARMAH, Prantik</a>	Universe at extreme energies through GZK neutrinos and photons
15:15-15:30	<a href="#">TIWARI, praveer</a>	DEEP-TOV FOR CHARACTERIZING NEUTRON STARS
15:30-15:45	<a href="#">SARMAH, Priyanka</a>	Superradiant driven evolution of Active Galactic Nuclei
15:45-16:00	<a href="#">SHAIKH, Rajibul</a>	Black hole mimickers in light of the recently observed shadows of Sagittarius A* and M87*

Time	Name	Title of the talk
<b>Workshop on Classical &amp; Quantum Gravity (14:30-16:00, Day-2)</b>		
Session Chairs: <a href="#">Kinjalk Lochan</a> and <a href="#">Swapna Mahapatra</a>		
<b>Session-1 (Venue: 5004)</b>		
14:30-14:45	<a href="#">S R, Haridev</a>	Spontaneous Symmetry Breaking in Rindler frame and AdS space
14:45-15:00	<a href="#">SAHOTA, Harkirat Singh</a>	Analyzing quantum gravity spillover in the semiclassical regime
15:00-15:15	<a href="#">CHAKRABORTY, Indranil</a>	A master equation for gravitational wave memory
15:15-15:30	<a href="#">STARGEN D, Jaffino</a>	Unruh effect via radiative energy level shift
15:30-15:45	<a href="#">CHAKRAVARTI, Kabir</a>	QBHs in the Sky
15:45-16:00	<a href="#">PAITHANKAR, Kajol</a>	Rindler trajectories and Rindler horizons in the Schwarzschild spacetime
<b>Session-2 (Venue: 5003)</b>		
14:30-14:45	<a href="#">BHATTACHARYYA, Koushiki</a>	End-state of gravitational collapse of scalar and vector fields: Strong naked singularities
14:45-15:00	<a href="#">BHATTACHARYA, Krishnakanta</a>	Boundary terms and Brown-York quasi-local parameters for scalar-tensor theory
15:00-15:15	<a href="#">SAKETH, M. V. S</a>	Membrane paradigm for slowly spinning compact objects
15:15-15:30	<a href="#">SHAFEEQUE, Muhammed</a>	Charged Scalar Hair on Reissner-Nordström Black Holes
15:30-15:45	<a href="#">GHOSH, Nihar Ranjan</a>	Fate of an infalling Passenger at the Cauchy Horizon of a Reissner-Nordström Black Hole
15:45-16:00	<a href="#">POPLAWSKI, Nikodem</a>	Gravitational collapse with torsion and nonsingular Universe in a black hole
<b>Workshop on Cosmology (14:30 - 16:00, Day-2)</b>		
Session Chairs: <a href="#">Pravabati chingangbam</a> and <a href="#">Girish Kulkarni</a>		
<b>Session-1 (Venue: 5002)</b>		
14:30-14:45	<a href="#">RAHMAN, Fazlu</a>	Morphological Characterization of Galactic Foreground Emissions
14:45-15:00	<a href="#">SAHA, Indrajit</a>	Ultra-light primordial black holes from first-order phase transition with unique gravitational wave spectrum
15:00-15:15	<a href="#">GUPTA, Kaustubh</a>	Measuring secondary halo bias using nearest neighbor distributions
15:15-15:30	<a href="#">NOBLE, Leon</a>	Impact of sources of Epoch of Reionization (EoR) on the 21-cm bispectrum

Time	Name	Title of the talk
15:30-15:45	SHARMA, Mahavir	The co-evolution of supermassive black holes and their host haloes
15:45-16:00	HAQUE, MD RIAJUL	Primordial black hole reheating and its possible signatures
<b>Session-2 (Venue: 5001)</b>		
14:30-14:45	KAMRAN, Mohammad	Probing the HI distribution during post-reionization using the redshifted 21-cm marked power spectrum
14:45-15:00	MALSAWMTLUANGI, N	Cosmological events on the stochastic background of inflationary gravitational waves
15:00-15:15	P, NANDHIDA KRISHNAN	Emergence of cosmic space with Barrow entropy, a non-equilibrium thermodynamic description
15:15-15:30	CHAURASIYA, Navin	Galaxy-dark matter connection of photometric galaxies from the HSC-SSP Survey using weak lensing
15:30-15:45	SHAH, Neev	The abundance of core--collapsed subhalos in SIDM: insights from structure formation in $\Lambda$ CDM
15:45-16:00	BHAUMIK, Nilanjandev	Ultra-low mass primordial black holes in the early universe can explain the PTA signal
<b>Workshop on Gravitational Waves (14:30 - 16:00, Day-2, Venue: 5005)</b>		
Session Chairs: <a href="#">Parameswaran Ajith</a> and <a href="#">Sukanta Bose</a>		
14:30-14:45	PAUL, Kaushik	"ENIGMA" - An aligned-spin eccentric IMR waveform model for compact binary mergers
14:45-15:00	N V, Krishnendu	Inferring the quantum black hole signatures from gravitational-wave observations
15:00-15:15	MAHAPATRA, Parthapratim	Testing general relativity via direct measurement of black hole kicks
15:15-15:30	DUTTA ROY, Poulami	Testing of general relativity at the fourth post-Newtonian order
15:30-15:45	PATIL, Raj	Precision Gravity: Gravitational waves using Feynman diagrams
15:45-16:00	BHATT, Rajendra Prasad	Addressing issues in defining the Love numbers for black holes
16:00-16:30	<b>Tea Break</b>	

Time	Name	Title of the talk
<b>Special Sessions: Prof. A. K. Raychaudhuri Centenary Session (16:30 - 18:00, Day-2)</b>		
<b>Venue: Dr. Bhupen Hazarika Auditorium</b>		
Session Chair: <a href="#">Narayan Banerjee</a>		
16:30-18:00	<a href="#">SENOVILLA, José M</a>	Raychaudhuri and the singularity theorems
18:00-19:30	<b>Poster Session (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
19:45-21:30	<b>Conference Dinner</b>	
<b>8 December 2023 (Day-3)</b>		
<b>Plenary Session-1 (9:30-10:15, Day-3, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Sukanta Bose</a>		
09:30-10:15	<a href="#">BROEKGAARDEN, Floor</a>	Gravitational Wave Paleontology: a new frontier to probe massive stars through cosmic history
<b>Special Sessions: Special Gender Session (10:15-11:15, Day-3)</b>		
<b>Venue: Dr. Bhupen Hazarika Auditorium</b>		
Session Chair: <a href="#">Sumati Surya</a>		
10:15-11:15	<a href="#">SURYA, Sumati</a>	Introducing Working Group on Gender
	<a href="#">BAMBAH, Bindu</a>	Women of Gravity
11:15-11:45	<b>Tea Break</b>	
<b>Plenary Session-2 (11:45-12:30, Day-3, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Prayush Kumar</a>		
11:45-12:30	<a href="#">GHOSH, Archisman</a>	Cosmography with gravitational waves: from current detections to future observatories
12:45-14:15	<b>Lunch Break</b>	
<b>Workshop on Astrophysical Relativity (14:15-16:15, Day-3, Venue: 5006)</b>		
Session Chairs: <a href="#">Indranil Chattopadhyay</a> and <a href="#">Arunava Mukherjee</a>		
14:15-14:45	<a href="#">CHATTERJEE, Sourav</a>	Astrophysical Implications of Gravitational Wave Observations (Invited Talk)
14:45-15:00	<a href="#">CHAKRABORTY, Chandrachur</a>	Investigating the existence of gravitomagnetic monopole in M87*
15:00-15:15	<a href="#">DEBNATH, Sanjit</a>	Oscillating shocks in the transonic, viscous, variable $\Gamma$ accretion flows around black holes



Time	Name	Title of the talk
15:15-15:30	SARKAR, Shilpa	Imprints of spin on the solution and emission spectrum of accretion flows around black holes
15:30-15:45	SAU, subhadip	Shadow of regular black hole in scalar-tensor-vector gravity theory
15:45-16:00	PATRA, Subhankar	Spectral energy distributions for transonic accretion flow in non-Kerr spacetime
16:00-16:15	KALITA, Surajit	White dwarfs in Gaia survey to constrain the fine-structure constant
16:15-16:30	KUMAR, Amit	Neutrino dominated accretion flow around black hole
<b>Workshop on Classical &amp; Quantum Gravity (14:15-16:30, Day-3)</b>		
Session Chairs: <a href="#">Kinjalk Lochan</a> and <a href="#">Swapna Mahapatra</a>		
14:15-14:45	HOQUE, Sk Jahanur	Even a tiniest positive cosmological constant has a long tail (Invited Talk, <b>Venue: 5004</b> )
<b>Session-1 (Venue: 5004)</b>		
14:45-15:00	LALREMRUATI, P.C	The breaking point of general relativity through f(R) scalaron gravity and higher dimensional Kaluza-Klein gravity near Sgr A*
15:00-15:15	MAJUMDER, Paulami	Gyroscopic Precession in the Vicinity of a Black Hole's Event Horizon and Naked Singularity for Static and Stationary Spacetime
15:15-15:30	KUMAR, Prayush	Harmonic coordinates in binary black hole mergers
15:30-15:45	NIGAM, Rahul	Maximal volume of a black hole in 2+1 dimensions
15:45-16:00	MANDAL, Rituparna	Cosmology of Bianchi type-I metric using renormalization group approach for quantum gravity
16:00-16:15	SENGUPTA, sandipan	Extra dimension(s) of vanishing proper length: A non-Einsteinian phase in gravity and the implications
<b>Session -2 (Venue: 5003)</b>		
14:45-15:00	GUTTI, Sashideep	Causal description of marginally trapped regions in D dimensions
15:00-15:15	SATIN, Seema	Stochastic aspects for cosmic fluids
15:15-15:30	XAVIER, Semin	Is the no-hair theorem a feature of gravity or General Relativity?
15:30-15:45	GAUTAM, Shalabh	Compactified Hyperboloidal Evolution in Numerical Relativity
15:45-16:00	BISWAS, Shauvik	Galactic wormholes: Geometry, stability, and echoes

Time	Name	Title of the talk
16:00-16:15	GUPTA CHOUDHURY, Shibendu	Raychaudhuri Equation in the Context of a Collapsing Fermionic Distribution Incorporating Effective Four-Fermi Interaction
16:15-16:30	JANA, Soumya	Dyonic Kerr-Sen black holes revisited: shadow profiles and consequences
<b>Workshop on Cosmology (14:15 - 16:30, Day-3)</b>		
Session Chairs: <a href="#">Pravabati chingangbam</a> and <a href="#">Girish Kulkarni</a>		
14:15-14:45	SINGH, Saurabh	Instrumentation for redshifted 21-cm line observations (Invited Talk, <b>Venue: 5002</b> )
<b>Session-1 (Venue: 5002)</b>		
14:45-15:00	JAMAN, NUR	Gravitational Waves Background from Quintessential Inflation and NANOGrav data
15:00-15:15	MUKHERJEE, Purba	Reconstructing the universe with machine learning
15:15-15:30	H V, Ragavendra	Loop-level contributions of primordial non-Gaussianities and their observational consequences
15:30-15:45	KOTHARI, Rahul	A geometrical interpretation of foreground filters for HI intensity
15:45-16:00	CHANDRA, Rajorshi	Precision Weak Lensing Analysis In CMB Observations For Upcoming Missions
16:00-16:15	RAVEENDRAN, Rathul nath	Distinguishing cosmological models through quantum signatures of primordial perturbations
<b>Session-2 (Venue: 5001)</b>		
14:45-15:00	SHARMA, Ritik	The origin of supermassive black holes at high redshift
15:00-15:15	K, Roshna	Consistency of loop quantum cosmology with the cosmic microwave background bispectrum
15:15-15:30	SS, S	Qualitative Stability Analysis of Cosmological models in $f(T, \phi)$ Gravity
15:30-15:45	KUMAR YADAV, Sarvesh	A Bayesian Neural Network based ILC method to estimate accurate CMB polarization power spectrum over large angular scales
15:45-16:00	BHARTI, Sauraj	HI stacking predictions for upcoming surveys with SKA precursors
16:00-16:15	SHAIKH, Shabbir	Cosmology from Cross-Correlation of ACT-DR4 CMB Lensing and DES-Y3 Cosmic Shear
<b>Workshop on Gravitational Waves (14:15 - 16:30, Day-3, Venue: 5005)</b>		
Session Chairs: <a href="#">Parameswaran Ajith</a> and <a href="#">Sukanta Bose</a>		

Time	Name	Title of the talk
14:15-14:45	Anuradha Gupta	Probing fundamental Physics with gravitational wave observations (Invited Talk)
14:45-15:00	KABIR, Rakesh	Exploring the Efficacy of Curriculum Learning in Training Neural Networks for Gravitational Wave Detection and Parameter Estimation in Near-Realistic Conditions
15:00-15:15	DATTA, Sayak	Black holes immersed in environment
15:15-15:30	GHOSH, Sayantan	Unmasking noise transients mimicking intermediate-mass black hole binaries
15:30-15:45	BHATTACHARYYA, Soham	Effect of spins on the orbital dynamics of a binary system
15:45-16:00	MAGARE, Sourabh	Gear-up for the Action Replay: Leveraging Lensing for Enhanced Gravitational-Wave Early-Warning
16:00-16:15	JANA, Souvik	Probing the nature of dark matter using gravitational-wave strong lensing
16:30-17:00	<b>Tea break</b>	
<b>Public Lecture (17:00 - 18:15, Day-3, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Chair: <a href="#">Sumati Surya</a>		
17:00-18:15	<a href="#">REITZE, David</a>	The Gravitational-Wave Revolution: Observing Some of The Most Cataclysmic Events In The Universe With The Most Precise Detectors Ever Constructed
18:15-19:30	<b>Poster Session (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
19:45-21:30	<b>Dinner</b>	
<b>9 December 2023 (Day-4)</b>		
<b>Plenary Session (09:30 - 11:00, Day-4, Venue: Dr. Bhupen Hazarika Auditorium)</b>		
Session Chair: <a href="#">Sarbari Guha</a>		
09:30-10:15	<a href="#">KANEKAR, Nissim</a>	Do the Fundamental Constants change with Time?
10:15-11:00	<a href="#">BHATTACHARYA Sayantani</a>	Black hole thermodynamics in higher derivative theories of gravity
11:00-11:30	<b>Tea Break</b>	
11:30-12:45	<b>Poster Session (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
13:00-14:30	<b>Lunch Break</b>	

Time	Name	Title of the talk
<b>Workshop on Astrophysical Relativity (14:30 - 17:00, Day-4, Venue: 5004)</b>		
Session Chairs: <a href="#">Arunava Mukherjee</a> and <a href="#">Indranil Chattopadhyay</a>		
14:30-15:00	<a href="#">RANA, Vikram</a>	Seeing Hot and Energetic Universe through X-ray Eyes (Invited Talk)
15:00-15:15	<a href="#">SINGH, Tamanjyot</a>	Inclination distributions in tidal disruption events by spinning supermassive black holes
15:15-15:30	<a href="#">ZURAIQ, Zenia</a>	Massive, magnetized compact stars: Theory and Simulation
15:30-15:45	<a href="#">JANA, Susmita</a>	Gravitational analog of Gertsenshtein-Zeldovich effect
15:45-16:00	<a href="#">BANERJEE, Pritam</a>	Astrophysical significance of tidal interaction between white dwarfs and intermediate-mass black holes
16:00-16:15	<a href="#">SARKAR, Biplob</a>	Spectral and timing properties of GX 17+2 using AstroSat and NICER simultaneous view
16:15-16:30	<a href="#">MITRA, SAMIK</a>	Impact of the net vertical magnetic field on thick accreting torus around black holes
16:30-16:45	<a href="#">PATHAK, Mayank</a>	Investigation of black holes in analogous and astrophysical regimes
16:45-17:00	<a href="#">MAJUMDER, Seshadri</a>	A deeper insight into the accretion scenario of BH-ULXs with XMM-Newton
<b>Workshop on Classical &amp; Quantum Gravity (14:30 - 17:00, Day-4)</b>		
Session Chairs: <a href="#">Kinjalok Lochan</a> and <a href="#">Swapna Mahapatra</a>		
14:30-15:00	<a href="#">R., Loganayagam</a>	TBD (Invited Talk, <b>Venue: 5004</b> )
<b>Session-1 (Venue: 5004)</b>		
15:00-15:15	<a href="#">BHATTACHARYA, Soumya</a>	Gravitational wave memory for various black hole and wormhole geometries
15:15-15:30	<a href="#">CHANDRAN, Sree Mahesh</a>	Quantum-to-classical transition of leading-order background fluctuations
15:30-15:45	<a href="#">NAIR, Sreejith</a>	Love for an Expanding universe and SdS black holes
15:45-16:00	<a href="#">BHATTACHARJEE, Srijit</a>	A detection mechanism for black hole memory effect
16:00-16:15	<a href="#">K, Hari</a>	Unruh-de Witt detectors in curved spacetime
16:15-16:30	<a href="#">SARKAR, Subhodeep</a>	Perturbing the perturbed: Quasi-normal mode instability in asymptotically de Sitter black holes
16:30-16:45	<a href="#">DATTA, Sucheta</a>	On the propagation of gravitational waves in matter-filled Bianchi I universe

Time	Name	Title of the talk
<b>Session-2 (Venue: 5003)</b>		
15:30-15:15	GHOSH, Suman	Some classical aspects of Ellis-Bronnikov wormholes embedded in a warped background
15:15-15:30	PRIYADARSHINEE, supragyan	Analytic three-dimensional hairy charged black holes and thermodynamics
15:30-15:45	BHATTACHARYA, Swastik	An Effective Theory model for Black Hole Membranes from Constraints of Symmetry
15:45-16:00	RAHNUMA, Tabasum	Unified Insights in Gravity Theories: Asymptotic Symmetries and Celestial Holography
16:00-16:15	CHAKRABORTY, Tanmoy	Particle creation in a dynamical gravitational wave background
16:15-16:30	PARVEZ, Tausif	High-energy corrections to CGHS model: a systematic procedure
16:30-16:45	KUMAR, vishal	Emergent Spin in Quantum Cosmology of Bianchi Type-I Universe
<b>Workshop on Cosmology (14:30 - 17:00, Day-4)</b>		
Session Chairs: <a href="#">Girish Kulkarni</a> and <a href="#">Pravabati chingangbam</a>		
14:30-15:00	ADHIKARI, Susmita	The dynamics of Dark matter and the halo from Cluster to Dwarf scales (Invited Talk, <b>Venue: 5002</b> )
<b>Session-1 (Venue: 5002)</b>		
15:00-15:15	NADKARNI-GHOSH, Sharvari	Non-linear joint density-velocity evolution in $f(R)$ theories of modified gravity
15:15-15:30	KADAM, Siddheshwar	Dynamical system analysis in teleparallel gravity with boundary term
15:30- 15:45	NAYAK, Soumen	Synchrotron radiation from cosmic string wakes
15:45-16:00	PAL, Sourav	A semi-analytical treatment of coupled CDM-massive neutrino perturbations in diverse cosmological backgrounds
16:00-16:15	PRAMANICK, Suman	A new method to simultaneously determine the reionization history and power spectrum
16:15-16:30	MANDAL, Susobhan	The possibility of Q-balls as cosmological and galactic dark matter
<b>Session-2 (Venue: 5001)</b>		
15:00-15:15	MAITY, SUVASHIS	Loop contributions to the scalar power spectrum due to quartic order action in ultra slow roll inflation
15:15-15:30	GAVAS, Swati	A Local Perspective on Hubble Tension from Cosmological N-body Simulations
15:30-15:45	DUARY, Tanima	Signature flip in deceleration parameter: A thermodynamic phase transition?

Time	Name	Title of the talk
15:45-16:00	UPADHYAY, Ujjwal	Non-linear regression with errors on both axes and its implications on Hubble tension
16:00-16:15	MUKHERJEE, Upala	Dark energy in light of the early JWST observations
16:15-16:30	TIWARI, Yashi	Towards a possible solution to the Hubble tension with Horndeski gravity
<b>Workshop on Gravitational Waves (14:30 - 17:00, Day-4, Venue: 5005)</b>		
Session Chairs: <a href="#">Sukanta Bose</a> and <a href="#">Parameswaran Ajith</a>		
14:30-15:00	AGGARWAL, Nancy	Future GW detectors beyond the audio band for particle astrophysics and cosmology (Invited Talk)
15:00-15:15	BHATTACHARYA, Sulagna	Can LIGO Detect Non-Annihilating Dark Matter?
15:15-15:30	GHOSH, Suprovo	Tidal heating as a direct probe of Strange matter inside Neutron stars
15:30-15:45	BHAGWAT, Swetha	A novel test of strong field gravity using binary black hole ringdowns
15:45-16:00	GHOSH, Tathagata	Bayesian framework to infer the Hubble constant from cross-correlation of individual gravitational wave events with galaxies
16:00-16:15	PRASAD, Vaishak	Tidal deformation of dynamical horizons in binary black hole mergers and its imprint in their gravitational radiation
17:00-17:30	<b>Tea Break</b>	
17:30-18:00	<b>Conclusion: Concluding Remark (Venue: Dr. Bhupen Hazarika Auditorium)</b>	
19:45-21:30	<b>Dinner</b>	