

ASI2022 - List of selected abstracts in General Relativity and Cosmology

Name	CONFERENCE ID	AFFILIATION	TITLE	ABSTRACT TYPE By SOC
Arun Mangalam	ASI2022_833	Indian Institute of Astrophysics	Relativistic dynamics around black holes in galactic nuclei	Invited
Anupreeta More	ASI2022_488	IUCAA	Detection of Gravitational wave sources and gravitational lensing effects	Invited
Dhiraj Kumar Hazra	ASI2022_151	Institute of Mathematical Sciences, Chennai, India	Primordial features: how relevant are they?	Invited
Monika Sinha	ASI2022_848	Indian Institute of Technology Jodhpur	Effect of nuclear symmetry energy on neutron star properties	Invited
Anshuman Tripathi	ASI2022_738	Indian Institute of Technology Indore	Extraction of HI 21cm signal from Low-Frequency Radio Observations using Artificial Neural Networks.	Oral
Basundhara Ghosh	ASI2022_289	Indian Institute of Science	Intrinsic and extrinsic correlations of galaxy shapes and sizes in weak lensing data and gravitational flexions	Oral
Divyajyoti .	ASI2022_648	Indian Institute of Technology Madras	Exploring the effects of orbital eccentricity in the future detectors	Oral
Fazlu Rahman	ASI2022_773	Indian Institute of Astrophysics Bangalore	Multi-Frequency Statistical Analysis of Galactic Synchrotron Emission	Oral
Gopika K	ASI2022_422	IIT Hyderabad	A test of constancy of dark matter halo surface density and radial acceleration relation in relaxed galaxy groups	Oral
Lankeswar Dey	ASI2022_664	Tata Institute of Fundamental Research, Mumbai	Modeling pulsar timing array signals induced by spinning supermassive binaries in relativistic eccentric orbits	Oral
Mayuri Sathyanarayana Rao	ASI2022_79	Raman Research Institute	PRATUSH : a proposed Indian lunar orbiter experiment for studying the Cosmic Dawn	Oral
Mukesh Kumar Singh	ASI2022_740	International Centre for Theoretical Sciences, TIFR, Bengaluru	Improved early-warning estimates of luminosity distance and orbital inclination of compact binary mergers	Oral
Rajorshi Sushovan Chandra	ASI2022_696	The Inter-University Centre for Astronomy and Astrophysics, Pune, India	Primordial Power Spectrum Reconstruction from a CMB Weak Lensing Perspective.	Oral
Saurabh Singh	ASI2022_163	Raman Research Institute	On the detection of a cosmic dawn signal in the radio background	Oral
Shikhar Mittal	ASI2022_48	Tata Institute of Fundamental Research, Mumbai	Background of radio photons from primordial black holes	Oral
Sourabh Paul	ASI2022_777	McGill University	HI intensity mapping with the MeerKAT interferometer	Oral

Souvik Jana	ASI2022_682	ICTS-TIFR	Constraining cosmological parameters from strongly lensed gravitational wave events	Oral
subhabrata majumdar	ASI2022_51	TIFR	Non-thermal SZ - Cosmology and Astrophysics with a new kind of secondary CMB anisotropy	Oral
Suhani Gupta	ASI2022_484	Center for Theoretical Physics, Polish Academy of Sciences, Warsaw, Poland	Halo mass function as a probe of gravity	Oral
Susmita Jana	ASI2022_400	IIT Bombay	Constraints on the non-minimal coupling of electromagnetic field from astrophysical observations	Oral
Tathagata Ghosh	ASI2022_646	Inter-University Centre for Astronomy and Astrophysics	Simultaneous inference of neutron star equation of state and Hubble constant from a population of merging neutron stars	Oral
Aadarsh Mehta	ASI2022_718	International Centre for Cosmology(ICC)	Shadows and Precession in non-Kerr spacetime	Poster
Aditya Kumar Sharma	ASI2022_708	International Centre for Theoretical Sciences	Prospects for detection of continuous gravitational waves from spinning neutron stars lensed by the galactic SMBH.	Poster
Aishee Chakraborty	ASI2022_344	Harishchandra Research Institute (HRI)	A Complete Analytical Study of Multicritical Behaviour of Accretion Flow onto Schwarzschild Black hole	Poster
Amit Kumar	ASI2022_714	Inter University centre for Astronomy & Astrophysics, Pune	Environmental effects on dark matter distribution in galaxy clusters	Poster
Anirban Ain	ASI2022_181	Istituto Nazionale di Fisica Nucleare - sezione Pisa	All Sky All Frequency search for persistent gravitational waves sources in LIGO Virgo observations	Poster
Ankita Bera	ASI2022_621	Presidency University	Impact of cosmic ray heating on global 21-cm signal during cosmic dawn	Poster
Anuj Mishra	ASI2022_300	IUCAA	Gravitational Lensing of Gravitational Waves: Effect of Microlens Population in Lensing Galaxies	Poster
Archana Sangwan	ASI2022_465	Indian Institute of Technology Bombay	Constraining the dark energy-dark matter interaction model using low-redshift observations	Poster
Arpan Krishna Mitra	ASI2022_362	Harish-Chandra Research Institute	Multi-criticality and related bifurcation in accretion discs around non-rotating black holes -- an analytical study	Poster
Arun Kenath	ASI2022_367	CHRIST (Deemed to be University)	Gammaless GRBs?	Poster
Ashu Kushwaha	ASI2022_459	Indian Institute of Technology Bombay	Helical magnetic fields and baryon asymmetry of the universe	Poster
Barun Maity	ASI2022_145	National Centre for Radio Astrophysics - Tata Institute of Fundamental Research	Efficient Modelling of Cosmic Reionization using SCRIPT	Poster

Bikram Pradhan	ASI2022_499	Inter University Center for Astronomy and Astrophysics	General relativistic treatment of f - mode oscillations of hyperonic stars	Poster
Chandan Ganjigere Nagarajappa	ASI2022_482	University of KwaZulu-Natal	Using Machine learning to classify CMB temperature maps	Poster
Chinmay G	ASI2022_728	BITS Pilani	Properties of EMRIs of naked singularity and the gravitational radiation from them	Poster
Chinmay Gandevikar	ASI2022_651	BITS Pilani	Deep Learning Gravitational Waves Sources of LISA	Poster
Dileep Pavan Surya Jakka	ASI2022_736	Indian Institute of Technology Kharagpur	Detection of gravitational waves at LIGO using deep learning	Poster
Divya Rana	ASI2022_712	IUCAA Pune	The Subaru HSC weak lensing mass-observable scaling relations of spectroscopic galaxy groups from the GAMA survey	Poster
Gursharanjit Kaur	ASI2022_665	Indian Institute of Technology, Indore	Comparing different sampling techniques to chart the parameter space of Global 21 cm using Artificial Neural Networks.	Poster
Jishnu Sai P	ASI2022_481	Indian Institute of Science	On the primordial correlation of gravitons with gauge fields	Poster
Joseph P J	ASI2022_477	IIT Bombay	Interacting dark sector: mapping fields and fluids, and observational signatures	Poster
Julie Jacob Thomas	ASI2022_625	Mar Ivanios College, Thiruvananthapuram	The spherical evolution of cosmic voids in Chaplygin gas dark energy models	Poster
Kaushik Paul	ASI2022_670	Indian Institute of Technology Madras	Spin effects in the gravitational waveform from eccentric compact binary mergers	Poster
Kazuyuki Furuuchi	ASI2022_494	Manipal Centre for Natural Sciences, Centre of Excellence, Manipal Academy of Higher Education	Large-Field Inflation Models from Hybrid Extra Dimensions	Poster
Kishlay Singh	ASI2022_561	Indian Institute of Technology Indore	General Relativistic Radiative Transfer in Black Hole Systems	Poster
Koustav Chandra	ASI2022_443	Indian Institute of Technology Bombay	Are the sources of GW190521 and ZTF19abnrhr the same?	Poster
Kritti Sharma	ASI2022_370	Indian Institute of Technology Bombay	Deep Learning algorithm for Intermediate Mass Black Hole Binary hunt in GW window	Poster
Louise Rebecca	ASI2022_416	CHRIST (Deemed to be University)	Baryonic matter abundance and MONG	Poster
M LAXMAN	ASI2022_669	Indian Institute of Technology Madras	GW phase for high mass ratio compact binary black hole systems till fifth post-Newtonian order and tenth order in eccentricity	Poster

Mohd Sirtaz	ASI2022_671	University of Delhi	Gravitational Waves and Electromagnetic Radiation from Dyon-Dyon Bound Systems	Poster
Navin Chaurasiya	ASI2022_770	Inter-University Centre for Astronomy and Astrophysics	Galaxy-Dark halo connection and evolution to unprecedented high redshifts ($z \sim 1.4$) using HSC photometric galaxies	Poster
NILANJANDEV BHAUMIK	ASI2022_290	IISc Bengaluru	Primordial black holes and induced GWs from inflation and the imprints of reheating	Poster
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Olinda Fernandes	ASI2022_542	Manipal Academy of Higher Education	Critical Examination of String Gas Cosmology	Poster
Parthapratim Mahapatra	ASI2022_605	Chennai Mathematical Institute	Remnant black hole kicks and implications for hierarchical mergers	Poster
Prateek Gupta	ASI2022_415	Savitribai Phule Pune University	An algorithm for effective search of dark matter haloes or galaxy groups.	Poster
Prateek Sharma	ASI2022_451	Gurukula Kangri (deemed to be University), Haridwar	Geodesics of a Static Charged Black Hole Spacetime in $f(R)$ Gravity	Poster
rashmi uniyal	ASI2022_397	Government Degree College Narendranagar Tehri Garhwal Uttarakhand	Timelike Geodesics for Schwarzschild Black Hole in Clouds of Strings and Quintessence	Poster
Sagar Kumar Gupta	ASI2022_618	Indian Institute of Technology Bombay	Application of Gaussian mixture modeling in Intermediate Mass Black Hole search	Poster
SAMIK MITRA	ASI2022_600	IIT GUWAHATI	STEADY STATE GENERAL RELATIVISTIC MAGNETOHYDRODYNAMICS ACCRETION FLOWS AROUND BLACK HOLES	Poster
Sangita Chatterjee	ASI2022_189	Jadavpur University	IMPACT OF ACCRETION DISK ON THE GRAVITATIONAL WAVE PROFILE EMITTED FROM BINARY MERGER	Poster
Saurabh Saurabh	ASI2022_208	P.D. Patel Institute of Applied Sciences, Charusat University, Gujarat	Investigation of deviation of GR in semi-analytic RIAF using EHT and ngEHT	Poster
Semin Xavier	ASI2022_566	Indian Institute of Technology Bombay	An exact model for evaporating primordial black holes in cosmological space-time	Poster
Srinikitha Bhagvati	ASI2022_385	Indian Institute of Technology, Hyderabad	Bayesian analysis of time dependence of DAMA annual modulation amplitude	Poster
Subhajit Dandapat	ASI2022_668	Tata Institute of Fundamental Research, Mumbai	Modelling Hyperbolic Gravitational Wave Burst Events with Linear Memory	Poster

Sukhdeep Singh	ASI2022_176	Indian Institute of Technology Kharagpur	Fast Estimator for bispectrum of 3D cosmological fields	Poster
Suprovo Ghosh	ASI2022_254	IUCAA	Multi-physics constraints at different densities to probe nuclear symmetry energy in hyperonic stars	Poster
Surhud More	ASI2022_116	IUCAA	Cosmological constraints from the clustering and lensing signal of SDSS galaxies using Subaru HSC	Poster
Susovan Maity	ASI2022_448	PhD Student, Senior Research Fellow, Harish-Chandra Research Institute	Carter-Penrose diagrams for emergent spacetime in relativistic accreting black hole systems	Poster
Suvedha Naik	ASI2022_506	Manipal Centre for Natural Sciences, Manipal Academy of Higher Education, Manipal, Karnataka - 576 104	A Bayesian analysis of primordial features from particle production during inflation using Planck data	Poster
Swati Gavas	ASI2022_186	IISER Mohali	Halo mass function in scale invariant models	Poster
Vivek Sharma	ASI2022_280	Indira Gandhi National Tribal University, Amarkantak M.P.	Geodesics in 5D warped Ellis-Bronnikov background	Poster
Yashi Tiwari	ASI2022_295	Indian Institute of Science	Understanding the very early universe from the Cosmic Microwave Background anomalies	Poster
