



## INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS (An Autonomous Institution of the University Grants Commission)

## VISITING ASSOCIATES (Current List)

Last updated in June 2024

Total No. 237

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
1.	<b>Dr. Sheelu Abraham</b> Assistant Professor Department of Physics Marthoma College Chungathara, Malappuram Kerala - 679 334	Phone : 7875352218 (O) 9605892349 / 7875352218 (M) E-mail : sheeluabraham@gmail.com	My research interest lies in exploring state-of-the-art ML techniques to tackle problems related to astronomy & astrophysics. This includes star-galaxy- quasar classification, transient analysis in advanced LIGO, CRTS & Astrosat CZTI, photometric redshift. I also have experience in handling big data, GPU computing and Deep Neural Networks.
2.	<b>Dr. Abisa Sinha Adhikary</b> Assistant Professor Amity University Major Arterial Road (South-East) Action Area – II, Newtown Kolkata – 700 135	Phone : (033) 71020304 (O) / 9836231108(M) E-mail : abisa.sinha@gmail.com	Statistical simulation of Initial Mass Function using Bayesian MCMC methods, Multivariate Data Analysis using statistical tools like PCA, ICA, FA, DA and other multivariate techniques.
3.	<b>Dr. Aditi Agarwal</b> The Thanu Padmanabhan Center for Cosmology and Science Popularization (CCSP) SGT University, Delhi- NCR BP93, First Floor, Shalimar Bagh Delhi -110 088	Phone : 7259671750 (M) E-mail : aditiagarwal.phy@gmail.com	The main focus of my research is on active galactic nuclei (AGNs), such as quasars, blazars, and radio galaxies. I have contributed to our understanding of what is happening in these extraordinarily powerful centers of galaxies and in the relativistic jets they often emit, using analytical, observational, and computational techniques. Broadly my research interest is to explore the multi-wavelengthÅ temporal and spectral properties of blazars during different stages of the source on diverse timescales and examine the correlationÅ among multi-wavelength emissions of blazars during thirther help in understanding the origin of these emissions Å Å I have alsoÅ studied the frequency-dependent core shifts and parameter estimation for blazars using more than four decades of radio observations toÅ have a better understanding of targets such as theÅ dynamical evolution, the inner sub-parsee structure, dominant radiation mechanisms, and hocation multi-requency densions. For this, we haveÅ developed a piece-wise Gaussian fit technique to analyze the long-term light curves of ÅCNs Å I have significant experience in optical and near-IR photometry, spectroscopy, optical polarimetric observations, fardio observations, data reduction, and analysis. Recently, I have starded
4.	<b>Dr. Faizuddin Ahmed</b> Department of Physics University of Science & Technology Meghalaya Ri-Bhoi Meghalaya -793 101	Phone : 8638302021 (M) E-mail : faizuddinahmed15@gmail.com	My Research Areas Are Exact Solutions Of Fields Equations, Black Hole Physics, Naked Singularity, Relativistic
5.	<b>Dr. Gazi Ameen Ahmed</b> Department of Physics Tezpur University Napaam Tezpur - 784 028 Assam	Phone : (03712) 275556 (O) 9435014377 (M) Fax : (03712) 267006 E-mail : gazi@tezu.ernet.in, gazi@associates.iucaa.in	Development of light scattering theories, Development of experimental setups using laser- based instrumentation.

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6.	<b>Dr. Musavvir Ali</b> Assistant Professor Department of Mathematics Aligarh Muslim University Aligarh – 202 002 Uttar Pradesh	Phone : 9319257599 (M) E-mail : musavvirali.maths@amu.ac.in	General Theory of Relativity, Gravitation & Geometric Flow
7.	<b>Prof. G. Ambika</b> Emeritus Professor Indian Institute of Science Education and Research (IISER) Thiruvananthapuram – 695 551 Kerala	Phone : 9890463122 (M) E-mail : gouriambika@gmail.com	Nonlinear Dynamics and Chaos.
8.	<b>Dr. Sampurn Anand</b> Department of Physics Central University of Tamil Nadu Neelakudy Campus Thiruvarur - 610 005 Tamil Nadu	Phone : 8595856776 (O) 7490895656 (M) E-mail : jha.sampurna@gmail.com	Cosmology: Dark energy, structure formation, primordial magnetic fields
9.	<b>Dr. Rizwan Ul-Haq Ansari</b> Department of Physics School of Sciences Education and Training Building Maulana Azad National Urdu University, Gachibowli Hyderabad - 500 032 Telangana	Phone : (040) 23008323 (O) (040) 23536000 (R) 9490315023 (M) E-mail : rizwanans@gmail.com	Cosmology, Early Universe and Inflation, Cosmological Perturbation theory, Study of perturbations in dark energy, Braneworld Cosmology, late time acceleration of the universe.
10.	<b>Prof. Bijan Kumar Bagchi</b> Department of Physics Shiv Nadar University Gautam Buddha Nagar Greater Noida Uttar Pradesh - 201 314	Phone : 9874744141 (M) E-mail : bbagchi123@gmail.com	Gravity and Entropy from non- Hermitian perspective.
11.	<b>Dr. Tanwi Bandyopadhyay</b> Adani University Shantigram Township Near SGVP Circle Sarkhej-Gandhinagar Highway P.O. Adalaj Ahmedabad - 382 421	Phone : (079) 25558798 (O) 9925967683 (M) E-mail : tanwib@gmail.com tanwi@associates.iucaa.in	Gravitation, Cosmology.
12.	Dr. Arunima Banerjee Indian Institute of Science Education and Research (IISER) Tirupati C/o Sree Rama Engineering College (Transit Campus) Rami Reddy Nagar Karakambadi Road Mangalam (P.O.) Tirupati - 517 507 Andhra Pradesh	Phone : (0877) 2500446 (O) 9764456117 (M) E-mail : arunima.physics@gmail.com	The development of a coherent theory of the formation and evolution of galaxies, based on observational surveys of galaxies throughout the universe as well as computer simulations of the key physical processes at play during galaxy formation, is one of the central goals of contemporary

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13.	<b>Dr. Indrani Banerjee</b> Department of Physics and Astronomy National Institute of Technology Rourkela - 769 008 Odisha	Phone : 9674902730 (M) E-mail : indrani.physics1@gmail.com	General Relativity and Modified Gravity, Astrophysics, Cosmology
14.	<b>Prof. Shyamal Kumar Banerjee</b> Professor and Dean School of Basic Science & Research Sharda University 32, 34 Knowledge Park-III Greater Noida - 201 310	Phone : 9760818302 (M) E-mail : skb@associates.iucaa.in shyamal.kumar@sharda.ac.in shyamalbanerjee50@gmail.c om	General Relativity, Cosmology.
15.	<b>Dr. Sarmistha Banik</b> Department of Physics BITS Pilani, Samirpeth Hyderabad - 500 078	Phone : (040) 66303593 (O) 8466054465 (M) E-mail : sarmistha.b@gmail.com sarmistha@associates.iucaa.in	Nuclear Astrophysics, Neutron Stars, Supernova explosion, Gravitational Waves.
16.	<b>Dr. Prasad Basu</b> Department of Physics Cotton University College Hostel Road, Panbazar Guwahati - 781 001 Assam	Phone : (033) 25850641 (R) 8116819083 (M) E-mail : prasadcsp@gmail.com pbasu@associates.iucaa.in	Black hole accretion, gravitational waves, etc.
17.	Dr. Aru Beri IISER Mohali Office No-1F5, Academic Block-I Department of Physics IISER Mohali, Knowledge City, Sector 81, Sas Nagar, Mohali -140 306 Punjab	Phone : (0172) – 2293105 (O) : 9988481264 (M) E-mail : aruberi@iisermohali.ac.in	Multi-wavelength study of X-ray Binaries, Transient Astronomy which also includes the study of Very Faint X-ray Transients (VFXTs). Magnetosphere and Accretion disc Interaction Mechanisms in high magnetic field neutron star binaries. Constraining accretion geometry of neutron star X-ray binaries using Spin Phase Resolved Spectroscopy. To perform timing and spectral studies using data from X-ray instruments like AstroSat, NICER, NuSTAR, XMM-Newton, Swift to study accretion flows around NS-LMXBs and BH-LMXBs. Development of new and improved models for studying time resolved spectra during Thermonuclear X-ray bursts in a broadband. Calculation of orbital parameters of neutron star Be-binary systems. Calculation of abundances of elements during Thermonuclear bursts seen through spectral analysis of X-ray data.
18.	<b>Dr. Piyali Bhar</b> Department of Mathematics Government General Degree College Singur, P.O Jalaghata Hooghly - 712 409 West Bengal	Phone : (033) 26300126 (O) 8116754967 (M) Email: piyalibhar90@gmail.com	My major research area is General theory of relativity and modified gravity. My areas of research interest are exact solutions of Einstein Field Equations, Modeling of compact Star, Black hole, Wormhole and Gravastar model. Presently I have focused my attention to the study on compact objects and wormhole model using modified theory of Gravitation and compare the result with General theory of relativity. I am also interested to study the effect of pressure anisotropy and inclusion of charge to the space-time of compact star and wormhole in modified theory of gravitation and gravitational lensing phenomenon, i.e. deflection of light by the wormhole that offers a good possibility to detect the presence of a wormhole.

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19.	<b>Prof. Rashmi Bharadwaj</b> Room No. B504 Non-Linear Dynamics Research Lab. University School of Basic and Applied Sciences Guru Gobind Singh Indraprastha University Sector 16C, Dwarka Delhi - 110 078	Phone : (011) 25302415 (O) 9013534105 (R) 9868818880 (M) E-mail : rashmib22@gmail.com	Celestial Mechanics, Dynamical Astronomy, Nonlinear Dynamics, Applied Mathematics, Wavelet â "Fractal-Chaos, Complex Dynamics, Ordinary & partial Differential Equations,Numerical Analysis, Fluid Dynamics & Optimization, Atmospheric & Environmental Sciences, Fuzzy Mathematics, Optimization Techniques, Soft Computing - Data Sciences â "Machine Learning; Space Dynamics, Integral Equations & Boundary Value Problem, Big data Analysis
20.	<b>Dr. Priya Bharali</b> Department of Physics Mahatma Gandhi Government Arts College Mahe Pondicherry - 673 311	Phone : (0490) 2332319 (O) 8876660109 (M) E-mail : prbharali@gmail.com	I have studied two different x-ray transients using NuSTAR and Swift/XRT observation of the sources (MAXI J1820+070. GRS 1716-249). I have analyzed the data from the recent observation of two Galactic black hole candidates GRS 1716â "249 and MAXI J1820+070, in different modes (for timing and spectral study). Study in different modes helps to understand different physical mechanisms such as, the time variability of the observed flux, accretion disk dynamics, the spectral state evolution etc. Study of rapid X-ray variability together with X-ray spectroscopy can help in obtaining valuable information about physical environment in the vicinity of accreting compact object and accretion flow dynamics. In addition to XRBs, for GRBs we considered the possibility that an intrinsic thermal spectrum from a fire-ball like model, may be observed to be broadened if the system undergoes a rapid temperature evolution. I have constructed a toy model for GRB, with best possible set of parameters, to obtained maximum obtainable width of the spectrum.
21.	<b>Prof. Naseer Iqbal Bhat</b> Department of Physics University of Kashmir Hazratbal Srinagar - 190 006 Jammu and Kashmir	Phone : (0194) 22420078, (O) (0194) 2415631 (R) 9419079191 (M) Fax : (0194) 2421357 E-mail : dni_phtr@kashmiruniversity.a c.in	Observational Astronomy, Binary Stars, Variable Stars .
22.	<b>Dr. Tabasum Masood</b> Associate Professor Department of Physics Government Degree College Ganderbal – 191 201 Jammu and Kashmir	Phone : (0194) 2503456 9419500719 / 7006202562 (M) E-mail : drtabasumphysics@gmail.com tabasum.bhat@associates.iucaa.in	Area of Specilization is Astronomy Astrophysics Cosmology and Archaeoastronomy
23.	<b>Dr. Srijit Bhattacharjee</b> Indian Institute of Information Technology Room No. 5056, CC-3 Devghat, Jhalwa, Prayagraj Uttar Pradesh - 211 015.	Phone : (0532) 2922541 (O) (0532) 2922291 (R) 9874044497 (M) E-mail : srijuster@gmail.com	Black hole Thermodynamics Singularities in Black Holes and Semiclassical effects Testing Strong Cosmic Censorship Gravitational Memory Effect Asymptotic symmetrizes Membrane paradigm of Black Holes Quantum Field Theory in curved background In the past 5-6 years my research is more focused on issues of Black hole and its Thermodynamics. We could show that for any higher curvature gravity theories, the Jacobson-Myers entropy functional obeys the second law. We have also studied the no-hair theorems for static and stationary black holes. We have proven a scalar no-hair theorem for a reflecting star in flat as well as de-Sitter space. My recent research focuses on studying Asymptotic symmetries near the horizon of a black hole and obtaining memory of such symmetries. I want to understand if there is a holographic relation exists in flat space I am also studying the inner horizon instabilities and strong cosmic censorship conjecture in both classical and semiclassical framework for black hole spacetimes.
24.	<b>Dr. Debbijoy Bhattacharya</b> Manipal Centre for Natural Sciences Manipal Academy of Higher Education Dr. T.M.A. Pai Planetarium Building Manipal - 576 104 Karnataka	Phone : (0820) 2923571 (O) 9886895185 / 9845090185 (M) E-mail : debbijoy@gmail.com, : debbijoy.b@manipal.edu	General Relativity, Astrophysics, Cosmic Strings.

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25.	<b>Prof. Dipankar Bhattacharya</b> Department of Physics Ashoka University Plot No. 2 Rajiv Gandhi Education City Near Rai Police Station, Rai Sonipat – 131 029 Haryana	Phone : (0130) 2300667 (O) 9923697158 (M) E-mail : dipankar.bhattacharya@ashoka.edu.in	High Energy Astrophysics, Compact Stars, Explosive transients, Diffuse matter
26.	<b>Dr. Subhra Bhattacharya</b> Department of Mathematics Presidency University 86/1, College Street Kolkata - 700 073	Phone : 8274000563 (R) 9830403955 (M) E-mail : subhra.ju@gmail.com	General Relativity and its Applications, Cosmology - Problems pertaining to interacting models of Dark Energy and Dark Matter; Inflation, Wormholes, Emergent Universes
27.	<b>Dr. K.G Biju</b> Associate Professor Department of Physics WMO Arts & Science College Muttil PO, Wayanad Kerala - 673 122	Phone: (04936) 203382 (O) (04936) 246869 (R) 9447546217 (M) E-mail: kgbiju42@gmail.com	My area of research is extragalactic astronomy, and in which I am mainly working on the multi-wavelength characteristics of giant radio sources. My first research project was with Prof. Joydeep Bagchi of IUCAA, on a megaparsce-scale radio source hosted by an unusual spiral galaxy. Later on, we worked on a very peculiar radio source with precessing jets from a merging system of nine galaxies (Zwickys Nonet) at the centre of the galaxy cluster Abell 407. We have completed the multi- wavelength studies of five GRGs using GMRT observations and data from various optical, infrared and X-ray sky surveys. We are continuing the work with more samples of GRGs.
28.	<b>Dr. Susanta Kumar Bisoi</b> Department of Physics and Astronomy National Institute of Technology Rourkela – 769 008	Phone : (0661) 2462720 (O) : 9556861982 (M) E-mail : bisois@nitrkl.ac.in	Solar radio physics, solar radio astronomy, planetary radio astronomy, solar physics, space weather and sun-climate relations
29.	<b>Dr. Ritabrata Biswas</b> Department of Mathematics The University of Burdwan Golapbag, Burdwan West Bengal - 713 104	Phone : 9474341036 (R) 7407206393 (M) E-mail : biswas.ritabrata@gmail.com	Dark energy, Quantum cosmology.
30.	<b>Dr. Debasish Borah</b> Department of Physics Indian Institute of Technology Guwahati Assam - 781 039	Phone : 7896705801 (M) E-mail : debasish.phy19@gmail.com debasish@associates.iucaa.in	Neutrino masses, leptonic mixing, lepton flavor violation, dark matter model building, dark matter indirect detection signatures, connecting dark matter with neutrino physics, origin of matter antimatter asymmetry
31.	<b>Dr. Mridusmita Buragohain</b> School of Physics University of Hyderabad Prof. C. R. Road Gachibowli Hyderabad – 500 046 Telangana	Phone : (040) 23134400 (O) 9678998154 (M) E-mail : mriduphy@gmail.com	My research interest lies in understanding the molecular components of the Interstellar Medium (ISM) by investigating spectral footprints arising from these molecules. In particular, I am studying the spectroscopic properties of Polycyclic Aromatic Hydrocarbon (PAH) molecules whose characteristic features, popularly known as as & 'Aromatic Infrared Bands (AIBs) §et?M are believed to be abundantly seen towards varied astronomical targets. I work upon to identify the possible structures of PAHs in the astrophysical environment by comparing results of observations and results from theoretical quantum chemical calculations. One of the key components of my research aims to understand the formation/destructures in PAHs in the ISM. Currently, I am reducing and analysing data obtained by SUBARU/COMICS and AKARIRC telescope to see variations in PAH bands. For future, I have interest to work on James Webb Space Telescope (JWST), which operates at higher spatial/spectral resolution and sensitivity and will be useful to detect weak PAH bands. In fact, I have submitted two GO proposals for JWST observations for cycle 2.
32.	<b>Dr. Chandrachur Chakraborty</b> Manipal Centre for Natural Sciences Manipal Academy of Higher Education MCNS-Mahe Dr. T.M.A. Pai Planetarium Building Manipal – 576 104 Karnataka	Phone : 9635409176 E-mail : chandrachurchakraborty@gmail.com	General Relativity, Gravitational waves (theory), High energy astrophysics.

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33.	<b>Dr. Koushik Chakraborty</b> Department of Physics West Bengal Educational Service Burdwan West Bengal - 713 104	Phone : (033) 26802085 (O) (033) 25520674 (R) 9874134091 (M) E-mail : kchakraborty28@yahoo.com koushik@associates.iucaa.in	General Theory of Relativity.
34.	<b>Prof. Subenoy Chakraborty</b> Dean of Science Department of Mathematics Jadavpur University Kolkata - 700 032	Phone : (033) 25372518 (O) (033) 26845638 (R) 9433356784 (M) E-mail : subenoy@associates.iucaa.in schakraborty.math@gmail.com	Mathematical Physics, Quantum Mechanics, Relativity, Cosmology.
35.	<b>Dr. Sumanta Chakraborty</b> Indian Association for the Cultivation of Science Kolkata – 700 032	Phone : (033) 24734971 (O) : 9433249863 (M) E-mail : sumantac.physics@gmail.com	Alternative theories of gravity; Black hole physics; Thermodynamics of black holes; Gravitational Waves; Astrophysical processes involving black holes; Cosmology
36.	<b>Dr. Nand Kumar Chakradhari</b> SOS in Physics and Astrophysics Pandit Ravishankar Shukla University Raipur - 492 010 Chhattisgarh	Phone : (0771) 2262864 (O) : 9753872241 (M) E-mail : nkchakradhari@gmail.com	Supernovae, Chemically Peculiar Stars, Variable stars, Galaxies.
37.	<b>Dr. Luke Chamandy</b> National Institute of Science Education and Research P.O. Jatni, Khurda Bhubaneswar - 752050 Odisha	Phone : (0674)2494264 (O) 9861385164 (M) E-mail : lchamandy@gmail.com	
38.	<b>Prof. Hum Chand</b> Department of Physics and Astronomical Sciences Central University of Himachal Pradesh Temporary Academic Block Shahpur, Kangra Himachal Pradesh - 176 206	Phone : 9760154111 (R) 6396937743 (M) E-mail : humchand@gmail.com	Extra-galactic astronomy: (1) Time and space variation of fundamental constants using very high resolution spectra of QSOs, (2) MgII absorbers as probe of high-z proto-galaxy, viz environment and magnetic filed (3) Physical state of IGM using Lyman-alpha forest (4) Multi-wavelength study of AGN viz NLSy1s/BLSy1s (5) AGN variability properties on diverse time scale (iv) Weak emission line QSOs (6) AGN outflow and BAL- QSOs (7)Photometric reverberation mapping and black hole mass measurement of AGN.
39.	<b>Dr. Ramesh Chandra</b> Department of Physics DSB Campus Kumaun University Nainital - 263 002 Uttarakhand	Phone : (05942) 237450 (O) (05942) 231497 (R) 9690681836 (M) Fax : (05942) 237450 E-mail : rchandra.ntl@gmail.com rchandra@associates.iucaa.in	Multi-wavelength study of Solar flares, Solar eruptive events.
40.	<b>Prof. Suresh Chandra</b> Amity Centre for Astronomy & Astrophysics Amity Institute of Applied Sciences Amity University Campus Sector - 125, Noida - 201 313 Uttar Pradesh	Phone : (0120) 4392468 (O) 9818005663 (M) E-mail : sch@associates.iucaa.in, schandra2@amity.edu	Solar Physics, Interstellar Molecular Clouds.

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41.	<b>Dr. Ayan Chatterjee</b> Department of Physics Central University of Himachal Pradesh Temporary Academic Block Kangra - 176 206 Himachal Pradesh	Phone : (01892) 237285 (O) 9736863853 (M) E-mail : ayan.theory@gmail.com ayan_theory@associates.iucaa.in	Black hole physics.
42.	<b>Dr. Ritaban Chatterjee</b> Department of Physics Presidency University 86/1, College Street Kolkata - 700 073	Phone : (033) 40529844 (O) (033) 25642231 (R) 8017447597 (M) E-mail : ritaban.physics@presiuniv.ac.in : rito.chat@gmail.com	Structure and dynamics of accreting black hole systems.
43.	<b>Dr. Suchetana Chatterjee</b> Department of Physics Presidency University 86/1, College Street Kolkata - 700 073	Phone : 9163003206 (M) E-mail : suchetana.physics@presiuniv.ac.in	CMB, AGN, etc.
44.	<b>Prof. Asis Kumar Chattopadhyay</b> Department of Statistics University of Calcutta Kolkata - 700 073	Phone : (033) 22410071 (O) (033) 25001850 (R) 9831985850 (M) Fax : (033) 24764419 E-mail : akcstat@gmail.com akcstat@caluniv.ac.in	Star and Galaxy Formation, Analysis of Astronomical Data using Statistical Tools.
45.	<b>Dr. Pradip Kumar Chattopadhyay</b> Department of Physics Coochbehar Panchanan Barma University Vivekananda Street Coochbehar - 736 101 West Bengal	Phone : 9434483006(O) 9434134096(M) E-mail : pkc_76@rediffmail.com	I am currently working on modeling of Neutron/Strange stars. My aim is to develop models from theoretical standpoints to describe the relevant properties like mass and radius of such compact objects which are compatible with the recent observations.
46.	<b>Prof. Surajit Chattopadhyay</b> Head Department of Mathematics Amity University, Kolkata Major Arterial Road, Action Area II Rajarhat, New Town Kolkata - 700 135 West Bengal	Phone : (033) 24535605 (O) (0312) 266353 (R) 9830736116 (M) E-mail : surajcha@associates.iucaa.in	Gravity, Thermodynamics, etc.
47.	<b>Dr. Raghavendra Chaubey</b> DST-Centre for Interdisciplinary Mathematical Sciences Institute of Science Banaras Hindu University Varanasi - 221 005	Phone : (0542) 2369337 (O) 9919267475 (M) E-mail : rchaubey@bhu.ac.in	Relativistic Cosmology, Dynamical Systems
48.	<b>Prof. Bhag Chand Chauhan</b> Department of Physics Central University of Himachal Pradesh (CUHP) Dharamshala, Dist. Kangra Himachal Pradesh - 176 215	Phone : (01892) 229573 (O) 9418472694 (M) E-mail : chauhan@associates.iucaa.in bcawake@hpcu.ac.in	Neutrinos in A&A and Cosmology.

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49.	<b>Dr. Laxmikant Chaware</b> Centre for Basic Sciences Pandit Ravishankar Shukla University Behind University Auditorium University Campus Raipur - 492 010	Phone : (0771) 2262216 (O) 9926555788 (M) Email :chaware.laxmikant@gmail.com	My area of research interest: (1) Galaxy morphology (2) studying isophotal shapes of galaxies at fainter surface brightness levels (3) Study of Low Surface Brightness galaxies (4) Study of dust in early-type galaxies Observational Experience: (1)Spectroscopic observation of galaxies using multi-fibre spectroscope A AOmega on 4 Maglo Australian Telescope (AAT) in service mode (2) Broad band optical, Near infrared and narrow band H-alpha imaging observations of galaxies using 2m Himalayan Chandra Telescope (Indian Astronomical Observatory, Hanle). (3)Narrow band H- alpha imaging observations from 2m telescope at IUCAA Girawali Observatory Data reduction and analysis experience: (1)Data reduction and analysis of images obtained using Large Format Camera (LFC) on 5m Hale telescope (Jadomar), NIR images from 4m NTT (ESO), images from 2m telescope at IUCAA Girawali Observatory, images from 2m HCT (Hanle) (2)Data reduction 4m Anglo Australian Telescope (3)2D bulge-disk decomposition (4)Redshift determination (5)Stellar population synthesis (6) Detection and analysis of Sutatin and II-Stelar packing (5)Stellar population synthesis (6)
50.	<b>Dr. Raka Vasant Dabhade</b> Department of Physics Fergusson College F.C. Road Pune - 411 004	Phone : (020) 67656056 (O) (020) 24699040 (R) 9372495956 (M) E-mail : rakadabhade@gmail.com	During my PhD the research area was in materials science especially plasma polymerization ans sensors. But in college I am presently involved with students projects and Astronomy popularization, hence do not have much Pure research background in Astronomy Astrophysics research as such.
51.	<b>Dr. Ankan Das</b> Institute of Astronomy Space and Earth Science AJ-316, Salt Lake Sector II Salt Lake - 700 091 West Bengal	Phone : 7439761297 (O) 9830469158 (M) E-mail : ankan@iases.org.in	About 270 molecules have been detected in interstellar space. This chemical diversity demands an understanding of how, when, and where these molecules were produced and excited. Briefly, my research is oriented around some general queries, such as what a molecule tells us about the physical aspects of the clouds. How were they cycled through various phases of stellar evolution, from birth to death? How far does chemical complexity go?
52.	<b>Dr. Himadri Sekhar Das</b> Department of Physics Assam University Silchar - 788 011 Assam	Phone : (03842) 270801 (O) : 7002836376 (M) E-mail : hsdas@associates.iucaa.in, himsekhar13@yahoo.co.in	Polarization due to Light Scattering, Cometary, Interplanetary and Interstellar Dusts, etc.
53.	<b>Dr. Prasanta Kumar Das</b> Birla Institute of Technology and Science – Pilani K.K. Birla Goa Campus NH-17B, Bye-Pass Road Zuarinagar, Sancoale Goa – 403 726	Phone : (0832) 2580448 (O) : (0832) 2580744 (R) : 8390048665 (M) E-mail : pdas@goa.bits-pilani.ac.in	High Energy Physics, Astrophysics and Cosmology. Early universe cosmology, modified gravity theories, non-singular bouncing and emergent cosmology, primordial gravitational waves
54.	<b>Dr. Shyam Das</b> Associate Professor Department of Physics Malda College Malda, Rabindra Avenue Rathbari, Malda West Bengal - 732 101	Phone : 9832500823 (M) E-mail : dasshyam321@gmail.com shyam_das@associates.iucaa.in	My research interests are focused on many areas in astrophysics and cosmology. Theoretical modelling of relativistic compact astrophysical systems by making use of observational data from astrophysical observables like Chandra, SKA, LIGO, is one of my research interest. I am interested to find exact solutions to Einstein field equations describing the space-time geometry of gravitationally bound systems and interpretations for a wide variety of physically motivated astrophysical systems. By adopting various ad-hoc approaches, I would like to generate exact solutions of Einstein field equations for a wide variety of physically motivated astrophysical systems. Gravitational collapse is also one of the interesting areas of my research. I am also interested in investigating the astrophysical astrophysical come of the modified theories of gravity. I intend to focus my research on pulsars and black holes surrounded by accretion disks and observational cosmology. Dark energy and dark matter is another field of my active research. Keeping in mind that the theoretical approaches to solving the Einstein field equations analytically and hence to find exact solutions are limited. I am now interested in numerical relativity that uses numerical methods which are widely accepted method in the field of research in general relativity.
55.	<b>Dr. Sudipta Das</b> Assistant Professor in Physics Department of Physics Visva-Bharati Siksha-Bhavana Santiniketan - 731 235	Phone : (03463) 261916 (O) (033) 24284525 (R) 7797285744 (M) E-mail : sudipta.das.m@gmail.com sudipta.das@visva- bharati.ac.in	Cosmology and Gravitation.
56.	<b>Dr. Abhirup Datta</b> Department of Astronomy, Astrophysics and Space Engineering Indian Institute of Technology Simrol, Khandwa Road Indore - 453 552	Phone :(0731) 6603545 (O) : 8518886478 (M) E-mail : abhirup.datta@iiti.ac.in	Radio astronomy, Aperture Synthesis, Imaging and Calibration, High redshift galaxy, etc.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
57.	<b>Dr. Kanan Kumar Datta</b> Assistant Professor Department. of Physics Jadavpur University Kolkata - 700 032	Phone : 8240742485 (M) E-mail : datta.kanan@gmail.com	Cosmology, Cosmic Reionization, 21-cm signal, Radio astronomy, post reionization with HI.
58.	<b>Dr. Sukanta Deb</b> Room No. 302 Department of Physics Cotton University Panbazar Guwahati - 781 001 Assam	Phone : (0361) 2601100 (O) 9810362087 (M) E-mail : sukantodeb@gmail.com sdeb@associates.iucaa.in	Automated classification of variable stars, astronomical photometry and spectroscopy of variable stars, light curve modeling, etc.
59.	<b>Dr. Dipak Debnath</b> Institute of Astronomy Space and Earth Science D3, Binayak Enclave Fartabad Beltala, Garia Kolkata - 700084 West Bengal	Phone : (033) 35911018 (O) 8961995355 (R) 9432680632 (M) E-mail : dipak.iases@gmail.com	I mainly work in the field of high energy astrophysics, especially Black Hole related topics. I also worked on studying properties of Gamma-ray Bursts, Solar Flares, etc. Implementation of the theoretical model in XSPEC is done to get direct estimation of accretion flow parameters from spectral fit. Correlation of X-ray and radio data is done to study the nature of the outflowing jets and understand disk-jet coupling in black holes.
60.	<b>Dr. Partha Sarathi Debnath</b> Department of Physics A.P.C. Roy Government College Himachal Bihar Matigara Siliguri - 734 010 West Bengal	Phone : (0353) 2571340 (O) 9474590804 (M) E-mail : parthasarathi6@hotmail.com partha.debnath@associates.iucaa.in	The research areas comprise to study some specific issue relevant for the cosmological model building, which incorporates the quantum nature of matter or both matter and gravity. Recent data from cosmological observations suggest that the universe may be passing through an accelerating phase of evolution. The late-time acceleration problem along with the dark matter problem is the most difficult challenges to modern gravitational theory. The late-time acceleration is attributed to a negative pressure fluid dubbed as dark energy. It is a challenging task in theoretical physics to find a precise theoretical framework for the present accelerate expansion. Along with these my research area may be addressed by publications in referred journal. 1. P. S. Debnath & B. C. Paul, Astrophys Space Sci, 366, 32 (2021). 2. Partha Sarathi Debnath, MPA, 35, 2050173 (2020). 3. Partha Sarathi Debnath, MPL A, 35, 2050216 (2020). 5. Partha Sarathi Debnath, JGMMP, 16, 1950169 (2019). 6. Partha Sarathi Debnath, Bikash Chandra Paul, JGMMP, 16, 1950105 (2020). 5. Partha Sarathi Debnath, JGMMP, 16, 1950169 (2019). 6. Partha Sarathi Debnath, JGMMP 16, 195010853 (2019). 7. Partha Sarathi Debnath, JUGMMP, 16, 1950005 (2019). 8. P. S. Debnath, A. Beesham and B. C. Paul, (206, 35, 115010 (2018). 9. P. S. Debnath, and S. Chose, PRD 79, 083534 (2009). 11. P. S. Debnath, B. C. Paul, and A. Beesham, PRD 76, 123505 (2007). 12. P. S. DEBNATH, B. C. PAUL, IMPD 15, 189 (2006).
61.	<b>Dr. Ujjal Debnath</b> Department of Mathematics Indian Institute of Engineering Science and Technology Botanical Garden P.O., Shibpur Howrah - 711 103 West Bengal	Phone : (033) 26684561 (O) (03216) 236567 (R) 9433353462 (M) Fax : (033) 26682916, 4564 E-mail : ujjaldebnath@yahoo.com, ujjal@associates.iucaa.in	Cosmological Models, Study of Singularities
62.	<b>Dr. Shantanu Desai</b> Department of Physics Indian Institute of Technology, Hyderabad Kandi, Sangareddy - 502 285 Telangana	Phone : (040) 23016173 (O) 9619127162 (M) E-mail : shantanud@iith.ac.in shntn05@gmail.com	Particle Astrophysics, Gravitational Wave Astronomy, Observational Cosmology and Galaxy Clusters, Astrostatistics
63.	<b>Dr. Reshma Sada Raut Dessai</b> School of Physical and Applied Sciences Faculty Block – A Goa University Taleigao Plateau Goa - 403 206	Phone : 8669609207 (O) (0832) 2752934 (R) 9423317344 (M) E-mail : reshma@unigoa.ac.in reshma.dessai@associates.iucaa.in	My research interest lies broadly in the study of multi-wavelength spectral and temporal properties of various X-ray sources including X-ray Binaries. I would aim to study the structure and dynamics of accreting neutron star binaries and understand the physics of accretion flow around these neutron stars in order to understand the role of magnetic fields in the accretion process. Spectral studies using instruments like ASTROSAT could help to develop a model for accretion in X-ray binaries. I gained experience in handling ASTROSAT data using SXT, LAXPC during the workshop conducted in Goa on afcaASTROSATT& data analysis. I also would be interested in studying the electromagnetic counterpart of neutron star binaries coalescence using gravitational waves. My Ph.D. research was in protos media in which I used the contrast matching technique of small angle neutron scattering to obtain numbers of connected and isolated nanopores in glass, ceramic and clay. Quasi-elastic neutron scattering was also used to study the diffusion properties of H2O confined in the interlayers of clay. This work may be extended to study nanopores in asteroids and meteorites to yield information relevant to their formation.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
64.	<b>Dr. Shanti Priya Devarapalli</b> Department of Astronomy University College of Science Osmania University Hyderabad - 500 007	Phone : (040) 27682247 (O) (040) 23340266 (R) 9160434604 (M) E-mail : astroshanti@osmania.ac.in	Observational study of Binaries, SdBs, Astro-seismology and Exoplanet studies.
65.	Dr. Anoubam Senorita Devi Department of Physics Manipur University Canchipur, Imphal – 795 003 Manipur	Phone : (03842) 270843 (O) 8011543868 (M) E-mail :senorita.anoubam@gmail.com	My main research area is high energy astrophysics, mainly dealing with X-ray satellite observed data analysis and studying the spectral and temporal properties of various kinds of X- ray sources including X-ray binaries, Ultra- luminous X-ray sources etc.
66.	<b>Dr. Moon Moon Devi</b> Department of Physics Tezpur University Napaam Sonitpur - 784 028 Assam	Phone : (03712) 275565 (O) 9004944457 (R) 9395072768 (M) E-mail : devi.moonmoon@gmail.com	Broader area of interest: Astroparticle physics. My research interests are in the fields of neutrino, cosmic ray and dark matter phenomenology and simulation, instrumentation, and data analysis of particle detectors. My doctoral thesis is on the simulation and physics potential study of the atmospheric neutrino interactions at the proposed magnetized from Calorimeter detector at the India- based Neutrino Observatory (INO). I have also developed and characterized a prototype stack of six-gap Resistive Plate Chamber (RPC) detectors. I am currently studying the particle production at astrophysical sources and the extensive air shower produced by those cosmic ray particles. As a part of the hyperkamickande collaboration, I am looking into the simulation and physics aspects including supernova neutrinos. Instrumentation for dark matter detectors have also been my interest.
67.	<b>Dr. Praveen Kumar Dhankar</b> Rashtrasant Tukadoji Maharaj Nagpur University Mahatma Jyotiba Phule Educational Campus, Amravati Road Nagpur Maharashtra	Phone : 9921984551 9561171316 E-mail : pkumar6743@gmail.com	General Relativity and Cosmology, high energy physics in various dimensions and Alternative theories of Gravitation, Modified Theories of Gravity.
68.	Dr. Mansi Dhuria Assistant Professor Department of Physics School of Energy Technology Pandit Deendayal Energy University Knowledge Corridor, Raisan Village PDPU Road Gandhinagar -382 007 Gujarat	Phone : (079) 23275264 (O) 9099632174 (M) E-mail : Mansi.dhuria@sot.pdpu.ac.in	Astro-particle Physics and Cosmology, Theoretical High Energy Physics
69.	<b>Dr. Archana Dixit</b> Department of Mathematics Gurugram University Gurugram, Sector-51, Haryana – 122 003.	Phone : 8171546320 (M) E-mail : archana.ibs.maths@gmail.com archanadixit@gurugramuniversity.ac.in	Cosmology, Dark Energy, Modified Gravity
70.	<b>Prof. Vijayakumar Honnappa</b> <b>Doddamani</b> Department of Physics Astrophysics Section, J B Campus Bangalore University Bengaluru - 560 056 Karnataka	Phone : (080) 22961484 (O) 9448673274 / 9481300346 (M) E-mail : drvkdmani@gmail.com	emit very high thermal and non-thermal radiation from unresolved compact nuclear regions called as Active galaxies (AGNs). Hence, AGNs are the most luminous objects in the universe. The nuclei of the active galaxies are very compact (r < 1014 cm, Edelson et al. 1996) and generates copious amount of energy nearly constant over the entire electromagnetic spectrum. An important property of AGN spectra involves the observation of both high and low ionization lines (HLs and LLLs). Low and high ionization lines we mean that these lines are emitted by joinic species with ionization potential (IP) 3‰2 20 eV (H 1, Mg IL, C II, Fe II, Ca II) and with high 12 3‰4 00 eV (CIV, NV) respectively (Marziani P, 2014). Active galaxies have been broadly classified into different types based on their luminosity, emission line properties, appearance and variability characteristics into Seyfert1 and Seyfert2 galaxies, HII regions, LINERS, Quasars, Blazars and Optically Violent Variables, etc. The physics of the diversification of AGNs, spectral properties, rapid, small and large amplitude line and continuum variability is not well understood. During my tenure as associate, I would like carry out optical/UV/X-ray spectroscopies studies of Seyfert galaxies and quasars.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
71.	<b>Dr. Broja Gopal Dutta</b> Department of Physics Rishi Bankim Chandra College (West Bengal State University) East Kantalpara, Naihati North 24 Parganas West Bengal - 743 165	Phone : (03220) 249227 : 9433413402 (M) E-mail : brojadutta@gmail.com broja@associates.iucaa.in	Astrophysics
72.	<b>Dr. Jibitesh Dutta</b> Department of Basic Sciences and Social Sciences School of Technology North-Eastern Hill University Mawkynroh-Umshing Mawlai Shillong - 793 022 Meghalaya	Phone : (0364) 2723659 (O) (0364) 2231147 (R) 9863021745 (M) E-mail : jdutta29@gmail.com jdutta@associates.iucaa.in	Gravitational Thermodynamics in Modified Gravity Theories, Dynamical Systems in Modified Gravity based Cosmology .
73.	Prof. Sukanta Dutta High Energy Physics and Cosmology Laboratory Department of Physics Sri Guru Tegh Bahadur Khalsa College University of Delhi Delhi -110 007	Phone : (011) 27667469 (O) (011) 41764214 (R) 9811687970 (M) E-mail : sukanta.dutta@gmail.com sdutta@associates.iucaa.in	High Energy Physics, Astroparticle Physics and Cosmology.
74.	<b>Dr. Mayukh Raj Gangopadhyay</b> Thanu Padmanabhan Centre for Cosmology and Science Popularization SGT University Gurgaon – 122 505 Haryana	Phone : (012) 42278183 (O) : 9748255419 (M) E-mail : mrg12grm@gmail.com	Early Universe Cosmology, Production of Primordial Blackholes and its implications on other physical phenomenon, String motivated cosmological model building, Cosmic microwave background and observational
75.	<b>Dr. Sudip Kumar Garain</b> Department of Physical Sciences Indian Institute of Science, Education and Research, Kolkata Mohanpur – 741 246 West Bengal	Phone : (033) 66340000 Extn. 1163 (O) 7303230354 (M) E-mail : sgarain@iiserkol.ac.in sudip.garain@associates.iucaa.in	Relativistic and non-relativistic MHD, MonteCarlo based Radiative Transfer, Finite volume methods on structured and unstructured mesh
76.	<b>Dr. Gurudatt Gaur</b> St. Xavier's College (Autonomous) Surajmal Zaveri Road Navrangpura Ahmedabad – 380 009 Gujarat	Phone : 9537672348 (M) E-mail : gurudattgaur@gmail.com gurudatt@associates.iucaa.in	Gravitational wave physics, Detector characterization and veto development for gravitational wave searches. Gravitational wave astronomy.
77.	<b>Dr. Sakshi Gautam</b> Department of Physics Panjab University Chandigarh – 160 014	Phone : (91172) 2534466 (O) (91172) 2995387 (R) 7087652380 (M) E-mail : sakshigautam@pu.ac.in	Phenomenology of Heavy Ion Collisions at Intermediate energies, Equation of State of Nuclear Matter, Isospin Physics, Nuclear Astrophysics

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
78.	<b>Dr. Prabir Gharami</b> Assistant Professor Department of Mathematics Belda College Belda, Paschim Medinipur West Bengal – 721 424	Phone : (03229) 255246 (O) : 7908008459 (M) E-mail : prabirgharami32@gmail.com	Mass transfer in contact binary stars, Role of magnetic field in the mass transfer process, accretion flows in different forms of X-ray binaries
79.	<b>Dr. Abhik Ghosh</b> Department of Physics Banwarilal Bhalotia College Ushagram, Asansol West Bengal - 713 303	Phone : 7477354789 (M) E-mail : abhik.physicist@gmail.com	Radio interferrometry, Astro-statistics, Observation and statistical detection of redshifted 21-cm HI signal, 21-cm Cosmology, Radio polarimetry, Extragalactic radio-source evolution at low frequencies, Detecting diffuse radio emission from galaxy clusters, Deep low frequency radio survey - Observations,
80.	<b>Dr. Suman Ghosh</b> Department of Physics Indira Gandhi National Tribal University Amarkantak- 484 887 Madhya Pradesh	Phone: 9433907900 (M) E-mail : smnphy@gmail.com	Gravitation, quantum field theory in curved space, astrophysics and cosmology
81.	<b>Prof. Sushant G. Ghosh</b> Centre for Theoretical Physics Jamia Millia Islamia Jamia Nagar New Delhi - 110 025	Phone : (011) 26984830 (O) (0129) 93555618 (R) 9971348628 (M) Fax : (011) 26981753 E-mail: <u>sgghosh@jmi.ac.in</u> sgghosh@gmail.com	General Relativity, Cosmology.
82.	<b>Dr. Tuhin Ghosh</b> School of Physical Sciences National Institute of Science Education and Research Khurda - 752 050 Odisha	Phone: 6742494292 (O) 8847858187 (M) E-mail : tghosh@niser.ac.in	Cosmology with Cosmic Microwave Background radiation and thermal Sunyaev-Zeldovich effect. Detection of the primordial gravitational waves from early Universe and physics of the interstellar medium.
83.	Dr. Ankur Gogoi Assistant Professor Department of Physics Jagannath Barooah College (Autonomous) Jorhat - 785 001 Assam	Phone: (0376) 2320060 8876342499 (M) E-mail : ankurgogoi@gmail.com	Light scattering by interstellar dust analogues, light scattering by turbid media, biophotonics, laser based instrumentation
84.	<b>Dr. Rupjyoti Gogoi</b> Department of Physics Tezpur University Napaam Tezpur - 784 028	Phone : (03712) 275577 (O) (03712) 273822 (R) 9435559488 / 8011417860 (M) E-mail : gogoi@associates.iucaa.in : rupjyotigogoi@gmail.com	Infrared studies of nearby galaxies.
85.	Dr. Gaurav Goswami 309, School of Arts and Sciences Ahmedabad University Central Campus Navrangpura Ahmedabad - 380 009	Phone : (079) 61911171 (O) 8238629410 (M) E-mail : gaurav.goswami@ahduni.edu.in	Interface of cosmology and high energy physics.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
86.	<b>Dr. Umananda Dev Goswami</b> Department of Physics Dibrugarh University Dibrugarh - 786 004 Assam	Phone : (0373) 2370224 (O) : 9435618206 (M) E-mail : umananda2@gmail.com umananda@associates iucaa i	Theoretical and experimental astroparticle physics, Astronomy, astrophysics and cosmology.
	Dr. Armer e Courd e		Data Mining Distributed Data Mining
87.	Head Dept. of Computer Engineering Government Polytechnic Varkund Daman Daman and Diu - 396 210	E-mail : arubitsgoa@gmail.com	Machine Learning, Parallel/Distributed Computing, Relational Data Mining, Database Systems.
88.	<b>Dr. Shivappa Bharamappa</b> <b>Gudennavar</b> Department of Physics and Electronics Christ (Deemed to be University) Bengaluru - 560 029 Karnataka	Phone : (080) 40129387 (O) 8310189407 (M) E-mail : shivappa.b.gudennavar@christuniversity.in shivappa@associates.iucaa.in	Interstellar medium, Extragalactic astronomy.
89.	<b>Dr. Sarbari Guha</b> Department of Physics St. Xavier's College 30, Park Street Kolkata - 700 016	Phone : (033) 22877278, 22801927 (O) 9231665828 (M) Fax : (033) 22879966 E-mail : srayguha@yahoo.com, guha@associates.iucaa.in	General Relativity and Cosmology.
90.	<b>Dr. Mamta Gulati</b> School of Mathematics Thapar Institute of Engineering and Technology Bhadson Road, Adarsh Nagar Patiala - 147 004 Punjab	Phone : (0175) 2393436 (O) : 8284903760 (M) E-mail : mamta.gulati@thapar.edu	Galaxy evolution, Gravitational dynamics, Lopsided galaxies, Galactic nuclei, Stellar orbits
91.	Dr. Priya Hasan Department of Physics Maulana Azad National Urdu University Gachibowli Hyderabad - 500 032 Telangana	Phone : (040) 23006612-15 (O) (040) 23306959 (R) 9701811881 (M) E-mail : priya.hasan@gmail.com priya@associates.iucaa.in	Star clusters, Star formation, Photometry, Image processing.
92.	<b>Dr. Golam Mortuza Hossain</b> Department of Physical Sciences IISER, Kolkata Mohanpur, Nadia - 741 246 West Bengal	Phone : (033) 61360000 Extn. 1211 9477934777 (M) E-mail : ghossain@iiserkol.ac.in golam.hossain@associates.iucaa.in	Gravitation and Cosmology (Classical and Quantum); Quantum Field Theory in curved Spacetime
93.	<b>Dr. Joe Jacob</b> Department of Physics Newman College Thodupuzha - 685 585 Kerala	Phone : (04862) 226086 (O) (04862) 220408 (R), 9846015011 (M) E-mail : drjoephysics@gmail.com joe@associates.iucaa.in	Microwave and Radio Wave Radiations, Microwave Imaging and Antennas.

No.	Name and Address	Phone and E-mail	Research Interests
94.	Dr. Rinku Jacob Assistant Professor of Physics Department of Basic Sciences & Humanities Rajagiri School of Engineering and Technology (RSET) Rajagiri Valley, Kakkanad Kochi - 682 039 Address for correspondence : Chembiserry House, Anchumana Road Near Atham Associates, Mamangalam, Edapally P.O, Ernakulam, Kerala – 682 025	Phone : (0484) 2660999 (O) (0484) 2343196 (R) 9446307919 (M) E-mail : rinku.jacob.vallanat@gmail.com	My areas of research include (a) Nonlinear Time Series Analysis using the measures of Complex Networks, (b) To study the effect of additive noises (white and colored noise) on topology of chaotic systems. These areas of research are applicable to different fields of science, especially in astrophysics, to analyze the light curve from variable stars and black hole systems which give us the information regarding the underlying nonlinear processes leading to the emission of light curves. This research can also be applied in the field of medical sciences for analyzing the E.C.G (Electrocardiography) and E.E.G (Electroencepha-lography) data. The E.C.G data contains the information regarding the dynamics of the heart and the E.E.G data hold the information about the complex processes that take place inside the brain. So the study on the E.C.G data helps one to predict the chances of occurring the different cardiac problems and that of E.E.G data helps to understand more on the underlying dynamics which assist to predict the occurrence of epileptic conditions in a patient.
95.	<b>Dr. Chetana Jain</b> Department of Physics Hansraj College A-3/27, Sector 3, Rohini Delhi – 110 085	Phone : (011) 27667747 (O) : 9818945708 (M) E-mail : chetanajain11@gmail.com	The interactions of compact objects with their immediate surroundings, Physics of accretion flow in LMXBs/HMXBs, Timing variabilites in X-ray pulsars, Spin and orbital evolution of X-ray binaries 5) Broadband spectroscopy of X-ray binaries 6) Pulse phase resolved spectroscopy
96.	<ul> <li>Prof. Deepak Jain</li> <li>Department of Physics</li> <li>Deen Dayal Upadhyaya College</li> <li>(University of Delhi)</li> <li>Sector-3, Dwarka</li> <li>New Delhi - 110 078</li> <li>Address for correspondence:</li> <li>91, Bhagirathi Apartments, Sector 9</li> <li>Rohini, Delhi - 110 085</li> </ul>	Phone : (011) 25099381 (O) Fax : (011) 25099380 (011) 27865102 (R) E-mail : djain@ddu.du.ac.in, djain@associates.iucaa.in	Dark Energy : Theory and Observations, Statistical Methods In Cosmology
97.	<b>Dr. Rajeev Kumar Jain</b> Department of Physics Indian Institute of Science Bengaluru - 560 012 Karnataka	Phone: (080) 22933618 (O) E-mail: rkjain@iisc.ac.in	Theoretical cosmology, Inflation and alternatives, Cosmic Microwave Background, Primordial magnetic fields, Non-gaussianities, Effective field theory of gravity, Modified gravity, Dark energy
98.	<b>Dr. Charles Jose</b> Department of Physics Cochin University of Science and Technology (CUSAT) South Kalamassery, Kalamassery Kochi - 682 022 Kerala	Phone : (0484) 2577290 (O) 8606434507 (M) E-mail : charlesmanimala@gmail.com	Cosmology, large scale structures in the universe, Probes of fundamental physics using cosmology, etc.
99.	<b>Dr. Jessy Jose</b> Department of Physics IISER Tirupati, Karakambadi Road Mangalam P.O - 517 507	Phone : 9945402801 (M) E-mail: jessyvjose1@gmail.com	Observational Astronomy, Star formation, HII regions, Feedback mechanisms, Brown dwarfs and free-floating planetary mass objects in the solar neighbourhood
100.	<b>Dr. Minu Joy</b> Department of Physics Alphonsa College Arunavaram P.O., Pala Kerala - 686574	Phone : (04822) 213033 (R) : 9747930507 (M) E-mail : minujoy@gmail.com minu@associates.iucaa.in	Cosmology and Quantum Gravity, Cosmological Perturbation.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
101.	<b>Dr. Jeena K.</b> Department of Physics Providence Women's College Malaparamba (P.0) Calicut - 673 009 Kerala	Phone: (0495) 2371696 9495658547 / 9495658547 E-mail :jeenakarunakaran@gmail.com	Multi Wavelength Study Of Ultra- luminous X-Ray Sources(Ulxs), AGNs, Blazars, Spectral And Timing Studies Of AGNs, X-Ray Data Analysis
102.	<b>Dr. Sathya Narayanan K.</b> Department of Physics The Cochin College Mattancherry Ernakulam - 682 002 Kerala	Phone : (0484) 2224954 (R) 9447217985 (M) E-mail : sathyanarayank@gmail.com	Diffuse UV astronomy, Dust reddening studies in molecular clouds, Galaxy evolution and formation
103.	<b>Prof. Md. Mehedi Kalam</b> Department of Physics Aliah University IIA/27, New Town Kolkata - 700 160	Phone : (033) 27062271(O) 7980608341 (R) 9836363707 (M) E-mail : mehedikalam@yahoo.co.in kalam@associates.iucaa.in	Relativity, Cosmology, Topological Defects, Wormhole and Blackhole Physics.
104.	<b>Dr. Sanjeev Kalita</b> Department of Physics Gauhati University Guwahati - 781 014 Assam	Phone : (0361) 2570531 (O) : 9864087304 (M) : 8761045225 (M) E-mail : sanjeevkalita1@ymail.com	Cosmology.
105.	<b>Dr. Nagaraja Kamsali</b> Associate Professor Department of Physics Bangalore University Bengaluru – 560 056	Phone : (080) 22961471 (O) : 9663373447 E-mail : kamsalinagaraj@gmail.com	Atmospheric and planetary physics
106.	<b>Prof. Pralay Kumar Karmakar</b> Department of Physics Tezpur University Napaam Tezpur – 784 028 Assam	Phone : (03712) 275550 (O) 9954431753 (M) E-mail : pkk@tezu.ernet.in	We have been actively involved to understand the basic physics of diversified equilibrium and instability processes in astrophysical (neutral plus plasma) fluids with different methods for years. The main motivation is to see the insightful mechanisms behind bounded structure formation in diversified circumstances from new perspectives. One of our recent studies puts forward a theoretic model formulation to study the excitation and propagation dynamics of the nucleus-acoustic waves (NAWs) in a compact astrophysical fluid system in a generalized fabric extensively. It considers a three-component plasma system composed of heavy-light nuclei and tiny electrons in a curved geometry. At the last stage of collapse, the material in rapidly rotaling white dwarf merger remnants is initially supported by rotation. The post-merger viscous phase causes detonation of the helium (He) envelope in white dwarf mergers. It hereby acts as potential triggering agents of Type-la supernovae. Our results may prove to be beneficial to diversified wave features in astrophysical compact objects, interiors, and correlated surroundings, especially white dwarfs, where the effects of viscoelastic dissipation, degenerate electron pressure, and strongly
107.	Dr. Sreeja S Kartha Assistant Professor Department of Physics & Electronics Christ (Deemed to be University) Hosur Road Bangalore- 560 029 Karnataka	Phone : (080) 40129328 (O) (048) 1245 7230 (R) 8086947950 (M) E-mail : sreeja.kartha@christuniversity.in	Extragalactic astronomy: In our group, we intend to understand the factors affecting the star-formation properties of the galaxies in the local universe to decipher the factors contributing to the evolution of the galaxies.
108.	<b>Dr. Pradeep Kumar Kayshap</b> VIT Bhopal University Bhopal-Indore Highway Kothrikalan Sehore – 466 114 Madhya Pradesh	Phone : 7465967251(M) E-mail : pradeep.kashyap@vitbhopal.ac.in	My research area covers various topics of solar physics research, and these specific research topics are listed below. Ultraviolet (UV) & Extreme ultraviolet (EUV) Spectroscopy of solar plasma. Magnetohydrodynamics (MHD) Waves and Instabilities Investigations of various localized/eruptive structures of the solar atmosphere (e.g., solar jets, bright points, magnetic loops, solar flares, and filaments eruptions) Origin & Propagation of MHD Waves in the solar plasma. Coronal Heating Problem Space Weather Drivers Variations in the Solar UV Irradiance.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
109.	<b>Dr. Arun Kenath</b> Department of Physics and Electronics Christ (Deemed to be University) Dharmaram College P.O. Hosur Road Bengaluru – 560 029	Phone : (080) 40129100 (O) : 9845413463 E-mail : kenath.arun@christuniversity.in	Dark matter (DM), dark energy (DE), and possible alternate models of DM and DE. The effects of admixture of DM particles on luminosities and lifetimes of the evolved stars like red giants
110.	<b>Dr. Nishikanta Khandai</b> School of Physical Sciences National Institute of Science Education and Research Bhubaneswar - 752 050	Phone: (674) 2494305 (O) 8249398879 (M) E-mail: nkhandai@gmail.com	Cosmology, Large Scale Structure, Cosmological Simulations, Active Galactic Nuclei and Galaxy Formation, Intergalactic Medium, 21cm line as a probe
111.	<b>Dr. Ram Kishor</b> Department of Mathematics Central University of Rajasthan NH-8, Bandarsindari, Kishangarh Ajmer - 305 817 Rajasthan	Phone : (01463) 238755 (O) 9166269698 (M) E-mail : kishor_math@curaj.ac.in rkishor@associates.iucaa.in	Celestial Mechanics: Mission Design under the influence of Perturbations 2. Nonlinear Dynamics and Chaos 3. Dynamical System- Solar system and Extra solar systems.
112.	Mr. Newton Singh Kshetrimayum Department of Physics National Defence Academy Khadakwasla Pune – 411 023	Phone : 8600328325 (M) E-mail : ntnphy@gmail.com	General relativity, Astrophysics, Cosmology, astrophysical systems like neutron star, quark star, black hole, worm hole, shadow of black hole, shadow of worm hole.
113.	Prof. Arun Venkatesh Kulkarni Birla Institute of Technology and Science KKB-Goa Campus, NH-17B Bypass Zuarinagar Vasco - 403 726 Goa	Phone : (0832) 2580309 (O) (0832) 2580502 (R) 9422971148 (M) E-mail : avkbits@goa.bits-pilani.ac.in avk@associates.iucaa.in	Nuclear Physics, Theoretical Physics, Numerical E&M, Physics teaching.
114.	<b>Mr. Bharat Kumar</b> Department of Physics and Astronomy National Institute of Technology Rourkela – 769 009 Odisha	Phone : 8368265133 (M) E-mail : kumarbh@nitrkl.ac.in	Nuclear Astrophysics and Gravitational Waves
115.	<b>Dr. Nagendra Kumar</b> Department of Mathematics M.M.H. College Ghaziabad - 201 009 Uttar Pradesh	Phone : (0120) 4575241 (O) (0120) 2986961(R) 9555739225 (M) E-mail : nkumar@associates.iucaa.in, nagendrakgk@rediffmail.com	MHD, Plasma Physics.
116.	<b>Dr. Rajesh Kumar</b> Department of Mathematics and Statistics DDU Gorakhpur University Gorakhpur - 273009 Uttar Pradesh	Phone : 7985619390 (O) 9621593372(M) E-mail : rkmath09@gmail.com	Major area: General Relativity and Cosmology Specialization: Gravitational collapse, Space-time singularity, Black- Hole, Naked Singularity, Dark energy, Cosmological modelling, Scalar field models of Dark energy in general relativity and modified theories of gravity

No.	Name and Address	Phone and E-mail	Research Interests
117.	<b>Dr. R.K. Sunil Kumar</b> Department of Information Technology Kannur University Soorya Kanthi Madappally College P.O., Vatakara Kannur - 673 102 Kerala.	Phone : (0497) 2784535 (O) (0496) 2503244 (R) 9447217092 (M) E-mail : sunilkumarrk@kannuruniv.ac.in	Nonlinear Time series Analysis and Its Applications in Vocal tract modelling Speech generation has classically been modelled as a linear system, which provides a convenient and simple mathematical formulation. However a number of nonlinear effects are present in the physical process which limits the effectiveness of the linear model. We have analysed Capacity Dimension (CD), Correlation Dimension (CRD), Kolmogorov Entropy (KE) and Largest Lyapunov Exponent (LLE) of selected phoneme from different speakers. Eigen values of the Reconstructed Phase Space (EV-RPS) and Spectral Decay Coefficients (SDC) are also extracted for speaker modelling. We have experimentally verified the effectiveness of the proposed speaker identification system based on the combination of nonlinear features using Feed Forward Multilayer Perceptron Classifier (FFMLP) simulated using the error back propagation learning algorithm. The results indicate that the human vocal tract shows the properties of a deterministic chaotic system and the proposed nonlinear features can be effectively used for improved speaker identification. Speech signal Processing in Noisy Conditions Audio-visual speech recognition is a promising approach to tackling the problem of reduced recognition rates under adverse acoustic conditions. However, finding an optimal mechanism for combining multi-modal information remains a challenging task.
118.	<b>Dr. Sanjay Kumar</b> Assistant Professor Department of Physics Patna University Patna - 800 005	Phone : 9413674416 (O) 8789705192 (M) E-mail : sainisanjay35@gmail.com	Solar Physics, Coronal Heating, Physics of Magnetic Reconnection, Magnetohydrodynamics, Computational Physics
119.	<b>Prof. Suresh Kumar</b> Department of Mathematics Plaksha University Alpha, Sector 101, IT City Road Sahibzada Ajit Singh Nagar Punjab – 140 306.	Phone : 7725905640 (M) E-mail : sukuyd@gmail.com sureshk@associates.iucaa.in	Dark Energy Cosmology, Exact Solutions, etc.
120.	<b>Dr. Richa Kundu</b> Department of Physics Miranda House, North Campus University of Delhi Delhi -110007	Phone : 9868211847(O) 8130606773 (M) E-mail : richa.kundu@mirandahouse.ac.in	Extra-tidal regions of Galactic globular clusters
121.	<b>Dr. Badam Singh Kushvah</b> Indian Institute of Technology Indian School of Mines Dhanbad – 826 004 Jharkhand	Phone : (0326) 2235765 (O) 9471191119 (M) E-mail : bskush@iitism.ac.in	My research interest includes Celestial Mechanics, Dynamical Astronomy, Orbital Mechanics and High Performance Computing. Many research articles have been published in international peer-veiveved journals including Monthly Notices of the Royal Astronomical Society, Acta Astronautica, Advances in Space Research, Astrophysics and Space Science, Astronomy and Computing, Planetary and Space Science, Earth, Moon and Planets, Chaos, Solitons & Fractals et c. In recent year substantial progress has been done to understand the long-term behaviour of the orbits of the planets, small bodies which may approach the Earth of other planets after long time and the long-term evolution is of great importance for these studies. The asteroids and exponentary systems could be classified in different families using machine learning methods with the help of many PYTHON libraries and packages such as PANDAS, KERAS, TENSORFLOW etc. The followings are research objectives for near future. I. Long-term Evolution of n-body simulation specially for Asteroids and explanatory systems. 2. Orbital Resonance and Stability. 3. Classification using Machine Learning Techniques. The IUCAA Library is sufficiently rich in Astronomy and Astrophysics books/Journals and study material. The state of art computing facility at IUCAA is very
122.	<b>Prof. Vinjanampaty Madhurima</b> Department of Physics Central University of Tamil Nadu Neelakudi Campus Thiruvarur - 610 005 Tamil Nadu	Phone : (04366) 277228(O) : 9444467728 (M) E-mail : madhurima.v@gmail.com	Since my post-graduation days, I have studied weak intermolecular interactions, especially hydrogen bonds. This has taken me through the studies of organic liquids, binary (and other) liquid mixtures, nano-fluids, liquid-solid interactions, self-assembly of droplets, colloids, polymers and gels. My primary training at the Microwave and materials lab at IIT Madras, and later at the Microwave and Functional Materials lab at University of Hyderabad, was in broadband dielectric spectroscopy, with a special focus in the microwave region. In addition, I work with various spectroscopic techniques such as FTIR, NMR, Zeta potential with light scattering and confocal microscopy. Over the last ten years, I have been studying solid-liquid interfaces using contact angle goniometry. Along with experimental techniques, since my PhD days, I have used computational techniques, since my PhD days, I have used conformation and spectral predictions. While most of my studies have been using ab initio Hartree-Fock/Density Functional Methods, a few studies using molecular dynamics and energy minimization for drops were done. All these results have been published over the years. As a part of teaching, I am also familiar with Multiphysics and high

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
123.	<b>Dr. Smriti Mahajan</b> Indian Institute of Science, Education and Research Knowledge City, Sector 81 SAS Nagar Manauli - PO Mohali - 140 306	Phone : (0172) 224012138 (O) 9653792580 (M) E-mail : mahajan.smriti@gmail.com	Evolution of galaxies; Observable properties of galaxies such as mass, star formation rate and colours; Multi- wavelength surveys of nearby galaxies; Environment of galaxies; large-scale structure formation.
124.	<b>Dr. Bibhas Ranjan Majhi</b> Department of Physics Indian Institute of Technology Room No. 305 Guwahati - 781 039 Assam	Phone : (0361) 2582722 (O) (0361) 2584722 (R) 9864594930 E-mail : bibhas.majhi@iitg.ac.in	General theory of Relativity, black holes, Black hole thermodynamics, Quantum field theory on curved spacetime, Hawking and Unruh effects.
125.	<b>Dr. Liton Majumdar</b> Assistant Professor National Institute of Science, Education and Research Room No. 03, Ground Floor Library Building Khurda - 752 050 Odisha	Phone : 6742494482 (O) 9330369269 (M) E-mail : liton@niser.ac.in	Astrochemistry, star and planet formation using infrared, radio and sub-mm astronomy, planetary and exoplanetary atmospheres
126.	<b>Prof. Shiva Kumar Malapaka</b> International Institute of Information Technology Room No. 212D, Hosur Road Electronics City Bengaluru - 560 100 Karnataka	Phone : (080) 28527627 Ext 147 (O) (080) 35810568 (R) 9491531716 (M) E-mail : malapaka@iiitb.ac.in	Direct Numerical Simulations of 3D- Magneto-hydrodynamic Turbulence and Hydrodynamic Turbulence, n-body simulations of planetary formation, etc.
127.	<b>Prof. Manzoor A. Malik</b> Department of Physics University of Kashmir Hazratbal Srinagar - 190 006 Jammu and Kashmir	Phone : (0194) 2272311 (O) (0194) 2421485 (R) 9596256448 (M) Fax : (0194) 2421357 E-mail : mmaalik@gmail.com	Cosmological Many- Body Problems, Dark Matter, CMB.
128.	<b>Dr. Mamta</b> Dept. of Physics and Electronics S.G.T.B. Khalsa College University of Delhi Campus Delhi - 110 007	Phone : 9818076507 (M) E-mail : mamta.phy26@gmail.com mamtad@associates.iucaa.in	Electro-weak Symmetry Breaking Mechanism, New Physics Searches at LHC.
129.	<b>Dr. Soma Mandal</b> Department of Physics Government Girls' General Degree College 7, Mayurbhanj Road Kolkata - 700 023	Phone : (033) 24481160 (O) 9836078964 (M) E-mail : soma2778@gmail.com soma@associates.iucaa.in	X-ray astronomical data analysis, Compact objects in strong magnetic field.
130.	<b>Dr. Tuhina Manna</b> St. Xavier's College (Autonomous) 15/3, Choudhury Para Second Bye-Lane Howrah – 711 104 West Bengal	Phone : (033) 22551235 (O) : 9830252849 / 9674989103 (M) E-mail : tuhina.manna@sxccal.edu	Modelling of Compact Stars in General Relativity and Modified theories of Gravity. Applications of General Relativity, Gravitational Lensing, precession of perihelion, time delay and Shadows of Black holes and Wormholes, Thin shell accretion disks.

No.	Name and Address	Phone and E-mail	Research Interests
131.	<b>Dr. Bari Maqbool</b> Department of Physics Islamic University of Science and Technology 1, University Avenue Awantipora, Pulwama - 192 122 Jammu and Kashmir	Phone : (01933) 247954 (O) (01933) 260056 (R) 8713918191 (M) E-mail : bmaqbool@iust.ac.in bari@associates.iucaa.in	My research interests include study of the X-ray Irradiated Accretion Discs in X-ray binaries through theoretical modelling and numerical calculations. This includes studying the effects of X-ray irradiation on the outer regions of the accretion disc in low mass X- ray binaries and understanding the long term variability observed on X-ray binaries. My research interest also includes the study of the timing properties of X- ray binaries. Presently, I am involved in
132.	<b>Dr. Titus K. Mathew</b> Department of Physics Cochin University of Science and Technology Kochi - 682 022 Kerala	Phone : (0484) 2577404 (O) (0484) 2577349 (R) 9995438460 (M) E-mail :titus@associates.iucaa.in tituskmathew@gmail.com titus@cusat.ac.in	Bulk viscous matter and current acceleration of the universe.
133.	<b>Dr. Ram Ajor Maurya</b> Department of Physics National Institute of Technology NIT Campus P.O. Calicut - 673 601 Kerala	Phone : (0495) 2285124 (O) 8129195894 (M) E-mail : maurya.ramajor@gmail.com	Helioseismology, MHD waves in Solar Atmosphere, Solar Eruptions and associated Phenomenon, Atmospheric Heating
134.	<b>Dr. Biman Jyoti Medhi</b> Associate Professor Department of Physics Gauhati University Jalukbari, Kamrup Assam - 781 014	Phone : 9411323918 (M) E-mail : bimanjmedhi@gmail.com biman.medhi@associates.iucaa.in	ISM-DUST, Polarization, Open star cluster, Star-formation, Comets and Variable star
135.	Prof. Irom Ablu Meitei Associate Professor Department of Physics Manipur University Canchipur Imphal - 795 003	Phone : (0385) 2443263 (O) 9402837749, 9863330936 (M) E-mail : ablu.irom@gmail.com	Astronomy and Astrophysics.
136.	Mr. Manesh Michael Assistant Professor Department of Physics Bharata Mata College Thrikkakara Kochi – 682 021	Phone : (0484) 2425121 (O) : (0477) 2278833 (R) : 9633620716 (M) E-mail : maneshmichael@gmail.com	Plasma Physics, Space & Astrophysical Plasma, Non-linear dynamics
137.	<b>Dr. Hameeda Null Mir</b> Department of Physics Government Degree College Tangmarg Kashmir - 193 401	Phone : 9469033913 (M) E-mail : hme123eda@gmail.com	Optical telescopes, Astrophotography, CCD Imaging, Data analysis.
138.	<b>Dr. Mubashir Hamid Mir</b> Assistant Professor Department of Physics Govt. Degree College (GDC) Baramulla - 193 101 Jammu & Kashmir	Phone : 9419081217 (O) 7006575530 (M) E-mail : mubiphst@gmail.com	X-ray Astronomy, Galaxy Clustering

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
139.	<b>Dr. Bivudutta Mishra</b> Department of Mathematics BITS- Pilani, Hyderabad Campus Jawahar Nagar Sameerpet Mandal Ranga Reddy Dist. Hyderabad - 500 078 Telangana	Phone : (040) 66303532 (O) 9000607523 (M) E-mail : bivudutta@gmail.com bivudutta@associates.iucaa.in	Dark energy and modified gravity
140.	<b>Dr. Sourav Mitra</b> Department of Physics Surendranath College (Under University of Calcutta) Kolkata - 721 636	Phone: (033) 23543876 8145360606 (M) E-mail: hisourav@gmail.com	Cosmology, Dark matter, Structure formation in the Universe, Intergalactic medium, Galaxy formation and Reionization.
141.	<b>Dr. Kamakshya Prasad Modak</b> Department of Physics Brahmananda Keshab Chandra College 111/2, B. T. Road, Bonhooghly Kolkata - 700 108 <i>Address for correspondence :</i> Postal :- Village - Sukharia (Shibtala) Post Office - Somra, District - Hooghly West Bengal - 712 123	Phone: (033) 25775878 (O) 8420146629 (M) E-mail: kamakshya.modak@gmail.com	My research area is mainly oriented to the study of the theoretical aspects of Dark Matter and its indirect detection. The indirect detection of DM involves detecting the particles (and their subsequent decays) or photons produced due to DM annihilations. Furthermore, there are other astrophysical hints for the existence of DM such as X-ray line from galaxy clusters, excess positron fraction in cosmic rays, self-interaction of DM from bullet cluster observation etc. Therefore, my research mainly focuses on the phenomenology of Dark Matter (DM) which includes the theoretical development for DM candidates from various viable particle physics models, various indirect searches for DM by analysing the possible annihilation products of DM in the astrophysical sites such as Galactic Centre, galaxy clusters as also from extragalactic sources as well as constraining mass and other parameters of DM in the light of astrophysics. Duber than DM physics, I have explored several other aspects of theoretical cosmology and particle physics, physics of neutron star, physics of early universe, neutrino physics, inflationary scenarios and numerical relativity. My expertise is also on computational physics and numerical simulations.
142.	<b>Dr. Sajahan Molla</b> Department of Physics New Alipore College Kolkata - 700 053	Phone : (033) 24071828 (O) 9748479412 (M) E-mail : sajahan.phy@gmail.com sajahan.molla@associates.iucaa.in	Compact object(neutron/strange star) study.
143.	<b>Dr. Saptarshi Mondal</b> Bethune College 24 Madan Pal Lane P.O Bhowanipur Kolkata - 700 025 West Bengal	Phone : (033) 22571712 (O) (033) 24543028 (R) 9163697689 (M) E-mail : saptarshi.stat1@gmail.com saptarshi_m@associates.iucaa.in	Globular clusters, Galaxy formation.
144.	<b>Dr. Aditya Sow Mondal</b> Department of Physics Visva-Bharati Siksha-Bhavana Santiniketan - 731 235 West Bengal	Phone : (03463) 261016 (O) 9732249932 (M) E-mail : adityas.mondal@visva- bharati.ac.in	Observational Astronomy. Probing the accretion geometry of neutron star low-mass X-ray binaries using the spectral and timing analysis.
145.	<b>Dr. Soumen Mondal</b> Department of Physics Jadavpur University, Main Campus 188, Raja S.C. Mallick Road Kolkata - 700 032	Phone : 8777485087 (M) E-mail : rkmrcsm@gmail.com soumen@associates.iucaa.in	Equation of state in accretion and wind flows, Gravity wave emission, etc.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
146.	<b>Dr. Mahadevappa Naganathappa</b> Gitam (Deemed to be University) Post : Rudraram Mandal : Patancheru Sangareddy Telanagana – 502 329	Phone : (08455) 221394 (O) : 8125546873 (M) E-mail : swamimahadev25@gmail.com	Infrared astrophysics, Cosmic molecules, Polycyclic aromatic hydrocarbons (PAHs), Quantum chemistry
147.	Prof. Hemwati Nandan Department of Physics HNB Garhwal University Srinagar Garhwal – 246 176 Uttarakhand	Phone : 8909916277, 9411319626 (M) Email : hemwati.nandan.physics@gmail.com hnandan@associates.iucaa.in	Kinematics of Deformations and Geodesic Flows.
148.	<b>Dr. Rajesh Kumble Nayak</b> Department of Physical Sciences Indian Institute of Science Education and Research (IISER) – Kolkata Mohanpur Campus P.O. Krishi Viswavidyalaya Mohanpur - 741 252 Dist. Nadia, West Bengal	Phone : 3473279137 (O) 9903507977 (M) Email : rajesh@iiserkol.ac.in <u>rajesh.kumble.nayak@gmail.com</u> rajesh@associates.iucaa.in	Gravitational wave data analysis, General theory of Relativity and Relativistic Astrophysics, Cosmology.
149.	Prof. Rahul Nigam BITS Hyderabad A-204, BITS-Pilani Hyderabad Campus Jawahar Nagar Kapra Mandal Hyderabad – 500 078 Telangana	Phone : (040) 66303615 (O) 9951403087 (M) Email : rahul.nigam@hyderabad.bits- pilani.ac.in	Lately I have been primarily working in two areas. 1. Black hole volume and entropy - The volume of a black hole is not unique and can be defined in various way. We investigate some of the techniques which maximize the black hole volume and then we study the entropy of a field residing in this volume. 2. We study the existing Hubble tension by analyzing the data from various probes like Hubble, Panstarrs.
150.	Dr. Chandrachani Devi Ningombam Assistant Professor Department of Physics Manipur University Canchipur Imphal (West) Manipur – 795 003	Phone : 6009487525 (M) E-mail : chandrachani@gmail.com	Large Scale structure Formation:Cosmological N-body simulations, Modified gravity N-body simula- tions, Halo occupation distribution-HOD modelling, Sub-Halo Abundance Matching, Void statistics, Galaxies clustering, Redshift space distortion-RSD, Galaxies cluster counts, Dark energyâ€TMs signature in LSS, The Early Universe: Inflation, Modified gravity Models: Scalar-Tensor-Theory, Solar system constrains, Gravitational waves.
151.	<b>Dr. Sachin P.C.</b> Assistant Professor Department of Physics Fatima Mata National College (Autonomous) Kollam - 691 001 Kerala	Phone : 9847817327 (M) E-mail : sachinpc@live.com sachin.pachat@associates.iucaa.in	Diffuse Warm-Hot Intergalactic Medium, Quasar Absorption Line Spectroscopy, Feedback Processes In Galaxies & AGN
152.	<b>Dr. Prince P.R.</b> Department of Physics University College M.G. Road, Palayam Thiruvananthapuram - 695 034 Kerala	Phone : (0471) 2475830 (O) (0471) 2438888 (R) 9495211211 (M) E-mail : princerprasad@gmail.com	Solar Terrestrial Physics, Magnetosphere, Solar activity, Ionosphere, Magnetosphere- Ionosphere coupling, etc.

No.	Name and Address	Phone and E-mail	Research Interests
153.	<b>Dr. Sreejith Padinhatteeri</b> Assistant Professor Manipal Academy of Higher Education Manipal Centre for Natural Sciences Dr. T.M.A. Pai Planetarium Complex Manipal Udupi – 576 104	Phone : (0820) 2571922 (O) : 8884850018 (M) E-mail : sreejith.p@manipal.edu	Solar Physics and Astronomical Instrumentation, formation and evolution of magnetic active regions (ARs) on the Sun and its connection with solar activities like flares and coronal mass eruptions, development of multiple space based astronomical telescopes, SSM and UVIT onboard Astrosat, development of Solar Ultraviolet Imaging Telescope (SUIT) onboard ADITYA-L1
154.	<b>Dr. Barun Kumar Pal</b> Netaji Nagar College For Women 170/13/1, N.S.C. Bose Road Kolkata - 700 092 West Bengal	Phone : (033) 24116711 (O) 9545518047 (M) E-mail : terminatorbarun@gmail.com barunpal@associates.iucaa.in	Cosmological Inflation, Cosmological Perturbations, Cosmic Microwave Background Radiation, Gravitational Lensing, Primordial Gravity Waves.
155.	<b>Dr. Main Pal</b> Sri Venkateswara College University of Delhi Dhaula Kuan New Delhi – 110 021	Phone : 9558133873 (M) E-mail : rajanmainpal@gmail.com	I am involved in the study of active galactic nuclei. Specifically, I have been working on broadband spectral and temporal analysis of Seyfert type 1 galaxies and blazars. In Seyfert type 1 galaxies, I tried to understand the interplay of accretion disk and X-ray corona using data sets from various space missions i.e XMM-Newton, AstroSat, Suzaku, Nustar, Swift. I also studied the jet emission in
156.	Dr. Biswajit Pandey Department of Physics Siksha Bhavana Visva-Bharati University Santiniketan - 731 235 Birbhum West Bengal	Phone : (03463) 262751 (O), (03222) 264183 (R) 7602198961 (M) E-mail : biswap@visva-bharati.ac.in biswap@associates.iucaa.in	Cosmology from the topology and morphology of large scale structures in the Universe, Testing homogeneity of the Universe, Redshift space distortions in Galaxy Redshift Surveys, 21 cm Cosmology, Large scale structure formation
157.	<b>Prof. Sanjay Kumar Pandey</b> Department of Mathematics Shri. L.B.S. Degree College Gonda - 271 003 Uttar Pradesh	Phone : (05262) 232994 (O) (05262) 232631 (R) 9415176625 (M) E-mail : pandey.star@gmail.com spandey@associates.iucaa.in	Cosmology, Large Scale Structure of the Universe, Statistical analysis of Reionization and post Â- reionization universe with the help of 21 cm radiation.
158.	<b>Dr. Mahadev Baburao Pandge</b> Dayanand Science College Barshi Road Latur - 413 512 Maharashtra	Phone : (02382) 223929 (O) 9881340347 (M) E-mail : mbpandge@gmail.com mbpandge@associates.iucaa.in	AGN Feedback in groups and clusters of galaxies, Cluster Dynamics, Star formation, galaxy formation and evolution.
159.	<b>Dr. Uma Papnoi</b> Assistant Professor Department of Physics Government PG College, Maldevta Raipur, Dehradun - 248008 Uttarakhand	Phone: 7838920239 (M) E-mail: uma.papnoi@gmail.com	General Relativity and Cosmology, Black holes, Black hole thermodynamics, Gravitational Lensing, Black hole shadow

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
160.	<b>Dr. Rutu Mahendrabhai Parekh</b> Associate Professor Dhirubhai Ambani Institute of Information and Communication Technology Room No. 2112, Faculty Block 2 Gandhinagar – 382 007 Gujarat	Phone : (079) 68261553 (O) : 9909902519 (M) E-mail : rutuparekh@gmail.com	Micro / Nanoelectronics, Chip Design, Embedded Systems and IOT
161.	<b>Dr. Amit Pathak</b> Department of Physics Banaras Hindu University Varanasi - 221 005 Uttar Pradesh	Phone : (03712) 267007/8/0, 275576 (O) E-mail : amitpah@gmail.com, amitp@associates.iucaa.in	Interstellar molecules and dust.
162.	<b>Dr. Kishor Dnyandeo Patil</b> Principal Dnyan Bharti College, Deoli Wardha-442101 Maharashtra	Phone : 7378779931 (O) 9766022512 (M) E-mail : kishordpatil@yahoo.com, kishor@associates.iucaa.in	General Relativity, Cosmic Censorship.
163.	Prof. Madhav Khushalrao Patil School of Physical Sciences Swami Ramanand Teerth Marathwada University Vishnupuri Nanded - 431 606 Maharashtra	Phone : (02462) 229242 (O) 8308298063 (M) E-mail : patil@associates.iucaa.in, mkpsrtm1@gmail.com	Astronomy and Astrophysics, Observation.
164.	<b>Dr. Bikash Chandra Paul</b> Department of Physics North Bengal University Darjeeling District Siliguri - 734 013 West Bengal	Phone : (0353) 2776338, 39 (O), (0353) 2526801 (R) 9434539881 (M) Fax : (0353) 2699001 E-mail : bcpaul@associates.iucaa.in, bc_paul@hotmail.com	Astrophysics, Cosmology, General Relativity.
165.	<b>Dr. Surajit Paul</b> Associate Professor Manipal Centre for Natural Sciences Manipal Academy of Higher Education Manipal – 576 104 Karnataka	Phone : 9405510226 (M) E-mail : surajit.paul@manipal.edu paulsurajit1@gmail.com	Cosmological simulations of large scale structures (LSS), Galaxy cluster formation, Radio observations of LSS.
166.	<b>Dr. Devraj Damaji Pawar</b> Department of Physics R.J. College Ghatkopar (West) Mumbai - 400 086	Phone : 9869458604 (M) E-mail : devrajdp@gmail.com devraj@associates.iucaa.in	X-ray astronomy.
167.	<b>Dr. Ninan Sajeeth Philip</b> Dean and Director Artificial Intelligence Research and Intelligent Systems (AIRIS4D) Thelliyoor - 689 644 Kerala	Phone : (0468) 2660510 (O) (0469) 2660510 (R) E-mail : nspp@associates.iucaa.in ninansajeethphilip@gmail.co m	Artificial Intelligence, Cryptography, Biodiversity

No.	Name and Address	Phone and E-mail	Research Interests
168.	<b>Dr. Ananta Charan Pradhan</b> Department of Physics and Astronomy National Institute of Technology Rourkela - 769 008	Phone : (0661) 2462735 (O) (0661) 2463735 (R) 7894252258 (M)	-
	Odisha	E-mail : acp.phy@gmail.com	
169.	Prof. Anirudh Pradhan Distinguished Professor & Director Centre for Cosmology, Astrophysics & Space Science (CCASS) G.L.A. University Mathura - 281 406 Uttar Pradesh	Phone : (05662) 250900 (O) (05662) 250909 (R) 9415358234/8476847655 (M) E-mail : pradhan.anirudh@gmail.com pradhan@associates.iucaa.in	General Relativity, Cosmology, Dark Energy.
170.	<b>Dr. Ram Prasad Prajapati</b> Associate Professor School of Physical Sciences Jawaharlal Nehru University New Delhi - 110 067	Phone : (011) 26738964 (O) 9826699220 (M) E-mail : prajapati.iter@gmail.com : rpprajapati@mail.jnu.ac.in	Structure formations, Molecular clouds, Jeans instability, Magnetohydrodynamics, Neutrino-beam-plasma interactions, Supernova explosions, Dense White Dwarf and Neutron stars, Dusty and Quantum Plasmas
171.	<b>Dr. Anisur Rahaman</b> Department of Physics Durgapur Government College Durgapur - 713 214 West Bengal	Phone : (0343) 2500534 (O) : 9434575422 / 7679478943 (M) E-mail : manisurn@gmail.com	Field theory and black-hole physics
172.	<b>Dr. Farook Rahaman</b> Department of Mathematics Jadavpur University Kolkata - 700 032	Phone : 9831907279 (M) E-mail : farook_rahaman@yahoo.com rahaman@associates.iucaa.in	GR, Cosmology, Topological Defects, Black Hole, Th. Astrophysics.
173.	<b>Dr. Nisha Rani</b> Assistant Professor Miranda House University of Delhi Delhi – 110 007	Phone : 8860865102 (M) E-mail : nisha.physics@mirandahouse.ac.in	Year 1998 has been an eventful year in cosmology in the sense that it witnessed one of the most celebrated discoveries, i.e. the discovery of the accelerated expansion of the universe. However, the physicists still do not understand the mechanism behind this. But the good part is that excellent progress has been made on the observational front in last few years which helps us to converge at flat JcCDM model, also referred to as the standard model of cosmology. According to this model, the universe is composed of dark energy, dark matter and baryonic matter. Dark energy is a hypothetical form of energy which is considered as the cause of accelerated expansion of the universe. In JcCDM model, J stands for the cosmological constant, a candidate of dark energy with equation of state, Ne=ä <sup>-1</sup> 1 at all times. But the problems like cosmological constant and coincidence problem moticates one to look for alternate models of dark energy. For this reason, our focus has been to understand late time acceleration of Universe. We used statistical techniques (parametric and non-parametric) along with various observational data like Na. ang of malysie. Hobbled data there area visitional heriting the
174.	Dr. Rakhi R. PG Research Department of Physics N.S.S. College Pandalam, Pathanamthitta Pandalam - 689 501 Kerala	Phone : 9497326945 (O) 8860228530 (M) E-mail : rakhinsscollege@gmail.com	Astrophysics: Star formation in Galaxies, Cosmology: Inflation and Dark Energy Models, Space Science
175.	<b>Dr. Rajesh S.R.</b> Department of Physics Sanatana Dharma College Sanatanapuram Kalacode Alappuzha – 688 003 Kerala	Phone : (0477) 2269350 (O) 9400235838 (M) E-mail : sivayaohm@gmail.com rajesh@associates.iucaa.in	Astrophysics and related hydrodynamics.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
176.	<b>Dr. Chayan Ranjit</b> Department of Mathematics Egra S.S.B. College Egra, Purba Medinipur - 721 429 West Bengal	Phone : (032) 20244073 (O) 919433927433 (M) E-mail: chayanranjit@gmail.com	Higher Dimensional Cosmological Model; Dark Matter; Dark Energy Models; Modified Gravity; Observational Data Analysis; Some Cosmological Parameters (Deceleration Parameter; State-finder Parameters, Om Diagnostic: Slow-Roll Parameters)
177.	<b>Prof. Shantanu Rastogi</b> Department of Physics D.D.U. Gorakhpur University Gorakhpur - 273 009 Uttar Pradesh	Phone : (0551) 2332398 (O) (0551) 2204517 (R) 9335631805 (M) E-mail : shantanu@associates.iucaa.in	Molecular Spectroscopy, Biopolymers and Moleculars of Astrophysical Importance, Infrared Spectroscopy.
178.	<b>Prof. C.D. Ravikumar</b> Department of Physics University of Calicut Kozhikode - 673 635 Kerala	Phone : (0494) 2401144 (O), (0466) 2282893 (R) 9447192136 (M) Fax : (0494) 2400269 E-mail : cdravi@gmail.com, ravi@associates.iucaa.in	Galaxies, Observational Astronomy, Extragalactic Astronomy, Quasars and AGNs.
179.	Prof. (Dr.) Saibal Ray Associate Director Centre for Cosmology, Astrophysics & Space Science (CCASS) GLA University 17 <sup>th</sup> KM Mile Stone, NH-2 Mathura-Delhi Highway Road P.O. Chaumuhan Mathura – 281 406 Uttar Pradesh	Phone : 9163169796/8910477467 (M) E-mail : saibal@associates.iucaa.in : saibal.ray@gla.ac.in	General Relativity, Astronomy, Astrophysics, Cosmology.
180.	<b>Dr. Biplab Raychaudhuri</b> Department of Physics Visva-Bharati University Santiniketan – 731 235 West Bengal	Phone : (03463) 261016 (O) (03561) 256048 (R) 9434464856 (M) E-mail : bipray@associates.iucaa.in :	Sagnac Effect in Curved Spacetime, General Relativity, Astrophysics.
181.	<b>Dr. Pramit Rej</b> Department of Mathematics Sarat Centenary College Dhaniakhali Hooghly - 712302 West Bengal	Phone : (03213) 255282 (O) 9475639012 (R) 9775172239 (M) E-mail : pramitrej@gmail.com	Mathematical Physics, Quantum Mechanics, Plasma Physics, General Theory of Relativity, Modified theories of Gravity, Theoretical Astrophysics, Modelling of Compact Stars in General Relativity and Modified theories of Gravity, Gravastar modelling, Wormhole modelling; Dark matter (DM), Dark energy (DE), and possible alternative models of DM and DE.
182.	<b>Dr. Rupak Roy</b> Manipal Center for Natural Sciences Manipal Academy of Higher Education Dr. T.M.A Pai Planetarium Building Madhav Nagar Manipal – 576 104 Karnataka	Phone : (0820) 2923599 (O) 7066564678 (M) E-mail : rupakroy1980@gmail.com	My research area is mainly based on High Energy Astrophysical phenomena (related to Time Domain Astronomy), viz. Supernovae, Superluminous Supernovae and Tidal Disruption Events. The main purpose of my research work is to characterize individual objects, to study their various bulk properties (using a large sample of similar types of objects) and also to study their environments. The necessary data are being obtained from different telescopes through individual proposal submissions, and also under large-scientific collaborations worldwide. I am also interested in the observational aspects of extremely energetic outflows from ACMs, Radio Galaxies etc. I am a member of various tansient follow-up groups - for e.g., PESSTO / ePESSTO / ePESSTO+ project which is a large project of the European Southern Observatory (ESO) and is being used for spectroscopic classification/follow- up of new transients. I use multi-wavelength data to characterize these energetic transients.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
183.	<b>Dr. Prabir Rudra</b> Assistant Professor Department of Mathematics Asutosh College	Phone : (033) 24554504 (O) (033) 24062196 (R) 9836724050 (M) E-mail : prudra.math@gmail.com	Theoretical astrophysics and cosmology.
	Postal Nabanna Apartment, Flat- 2B 21P Sagar Manna Road Behala Parnashree Kolkata - 700 060	rudra@associates.iucaa.in	
184.	<b>Dr. Aswathy S.</b> Assistant Professor Department of Physics Providence Women's College Malaparamba Calicut - 673 305 Kerala	Phone : (0495) 2371696 (O) (0496) 2620463 (R) 9895946308 (M) E-mail : aswathysahaj@gmail.com aswathy.sahaj@associates.iucaa.in	Co-evolution of supermassive black holes and their host galaxies, central light concentration in galaxies, evolution of galaxies with nuclear rings, optical studies of X-ray point sources in nearby galaxies, X-ray to optical association of Ultra luminous X-ray sources and stellar population synthesis of globular clusters in nearby Universe
185.	<b>Dr. Sunil Kumar S.</b> Indian Institute of Science, Education and Research Rami Reddy Nagar Karakambadi Road C/o. Sree Rama Engineering College (Transit Campus) Tirupati - 517 507	Phone : 8772500449 (M) E-mail : sunil@iisertirupati.ac.in sunil.phys@gmail.com	Major research areas: Laboratory astrophysics/astrochemistry and Molecular Biophysics. I am also interested in the topics below: Physics and chemistry of atomic/molecular ions of astrophysical, biological, and fundamental interest Trapping and cooling of atomic/molecular ions of astrophysical and biological relevance and their spectroscopy Experimental/theoretical investigations of photoabsorption by atoms/molecules and their ions Quantum chemistry of ion-neutral reactions of astrophysical relevance Quantum collisions of neutral and charged particles with atoms/molecules
186.	<b>Dr. Anirban Saha</b> Department of Physics West Bengal State University Berunanpukuria, Malikapur Barasat 24 Parganas (North) - 700 126 West Bengal	Phone : (033) 25241975 (O) (033) 25386288 (R) 9836021172 (M) E-mail : ani_saha09@yahoo.co.in, anirban@associates.iucaa.in	Non-commutative Field Theory, String Theory, Constrained Hamiltonian Dynamics, Classical GR, GW, etc.
187.	<b>Prof. Sanjay Kumar Sahay</b> Department of Computer Science and Information Systems BITS-Pilani K.K. Birla Goa Campus NH-17B, By Pass Road Zuari Nagar - 403 726 Goa	Phone : (0832) 2580243 (O) 9850145798 (M) Fax : (0832) 5643017 E-mail : ssahay@goa.bits-pilani.ac.in ssahay@associates.iucaa.in	Gravitational Wave Astronomy.
188.	<b>Prof. Sandeep Sahijpal</b> Department of Physics Panjab University Sector 14 Chandigarh - 160 014	Phone : (0172) 2534469 (O) (0172) 2724039 (R) 9815611039 (M) E-mail : <u>sandeep@pu.ac.in</u> , sandeep@associates.iucaa.in	Formation and Evolution of Solar System.
189.	<b>Dr. Pradyumn Kumar Sahoo</b> Birla Institute of Technology and Science Hyderabad Campus Jawahar Nagar, Kapra Mandal Hyderabad – 500 078	Phone : (040) 66303573 (O) : 9912564154 (M) E-mail : pksahoo@hyderabad.bits- pilani.ac.in	Relativity, Theoretical Cosmology, Dark Energy, Observational datasets, Astrophysical objects

No.	Name and Address	Phone and E-mail	Research Interests
190.	<b>Prof. Eeshankur Saikia</b> Department of Applied Sciences Gauhati University New Guist Building Guwahati – 781 014 Assam	Phone : (0361) 2570412 (O) : 9854121425 (M) E-mail : eeshankur@gauhati.ac.in	Astronomy & Astrophysics, Astrostatistics (Data Analysis), Computational Physics (Numerical Simulation), Instrumentation & Automation
191.	<b>Prof. Gauranga Charan Samanta</b> Associate Professor PG Department of Mathematics Old Campus Fakir Mohan University Vyasa Vihar, Balasore Odisha - 756 019	Phone : 8208103346 (M) E-mail : gauranga81@gmail.com	Theoretical Cosmology: General Relativity, Modified Gravity, Dark Energy and Wormhole Modeling
192.	<b>Dr. Prasant Samantray</b> Cabin B-304H Department of Physics BITS-Pilani Hyderabad Campus Shameerpet, Jawahar Nagar Secunderabad - 500 078 Telangana	Phone : 8878185151 (M) E-mail : prshkumar@gmail.com	AdS/CFT correspondence, string theory, quantum field theory, black holes.
193.	<b>Dr. Biplob Sarkar</b> Assistant Professor Department of Applied Sciences School of Engineering Tezpur University Napaam, Sonitpur Assam - 784 028	Phone : (03712) 273500 (O) : (0361) 4065074 (R) : 9101614336 (M) E-mail : biplobsiut@gmail.com	Physics of accretion flows around black holes. I explore the theoretical and observational aspects of accretion flow properties around black hole binaries. One of my major research interests is to understand the role of magnetic fields in the accretion flows around black holes. I have worked on the theoretical modelling of various observational aspects from black hole candidates like the accretion disc luminosity and jet kinetic power and how the shocks in accretion flows may help in explaining these observational findings. My other research area is to utilize AstroSat archival data of black hole binaries to examine the detailed spectro-timing characteristics of these sources. I along with my collaborators would identify the various spectral components in the wide band X-ray spectra of the black hole binaries using broad energy coverage in X-rays using joint spectrum from SXT and LAXPC. Also, we would consider about the detailed study of timing behaviour of the sources using advanced timing techniques e.g. power spectral density with the softwares LAXPCSoft and GHATS. We would also attempt to generate the spectrum of the black hole sources observed with AstroSat with the global magnetized accretion solutions for a black hole.
194.	<b>Dr. Prakash Sarkar</b> Kashi Sahu College Seraikella Dist - Seraikella-Kharsawan Seraikella -833 219 Jharkhand	Phone : (06597) 234323 7870820609 (M) E-mail : prakash.iucaa@gmail.com	Computational Cosmology, Analysis of galaxy redshift survey, N-body Simulations
195.	<b>Dr. Saumyadip Samui</b> Department of Physics Presidency University 86/1, College Street Kolkata - 700 073	Phone : 8158074782 (M) E-mail : ssamui@gmail.com, samui@associates.iucaa.in	Astrophysics and Cosmology.
196.	Dr. Subrata Sarangi Department of Physics Centurion University of Technology and Management Bhubaneswar Campus At : Ramachandrapur, Jatni Bhubaneswar – 752 050	Phone : 8260077222 (O) 7008398388 / 7735782033 (M) E-mail : subrata.sarangi@cutm.ac.in	Nuclear Structure Theory, Nuclear Matter Theory, Materials Science, Astrophysics

No.	Name and Address	Phone and E-mail	Research Interests
197.	<b>Dr. Tamal Sarkar</b> Scientific Research Officer Grade-II High Energy and Cosmic Ray Research Centre (HECRRC) University of North Bengal Raja Ram Mohunpur P.O. North Bengal University Siliguri - 734 013 West Bengal	Phone : (0353) 2776358 (O) : 8280528250 (M) E-mail: tsarkar@nbu.ac.in	General Theory of Relativity, Black hole physics, Black hole accretion, and gravitational waves
198.	<b>Dr. Anjan Ananda Sen</b> Centre for Theoretical Physics Jamia Millia Islamia Jamia Nagar New Delhi - 110 025	Phone : (011) 26984830 (O) (0120) 4131305 (R) 9818024543 (M) Fax : (011) 26981753 E-mail : anjsen@gmail.com, anjan@associates.iucaa.in	Dark Energy and Late Time Acceleration of the Universe, Brane World Cosmology, Loop Quantum Cosmology.
199.	<b>Prof. Asoke Kumar Sen</b> Department of Physics Assam University P.B. No. 63 Silchar - 788 011 Assam.	Phone : (03842) 270843 (O) (03842) 236979 (R) 9435070349 (M) Fax : (03842) 270802 / 270806 E-mail : aksen@associates.iucaa.in, asokesen@yahoo.com,	Comets, Solar System, Astronomical Observations.
200.	<b>Prof. Somasri Sen</b> Department of Physics Jamia Millia Islamia New Delhi - 110 025	Phone : (0120) 4131305 (R) 9717050331 (M) E-mail : somasri.sen@gmail.com ssen@jmi.ac.in	Cosmology, Gravitation, Astroparticle Physics.
201.	<b>Dr. Anand Sengupta</b> Department of Physics IIT Gandhinagar AB 5/326 Gujarat- 382055	Phone : (079) 23952432 (O) 8758146696 (M) E-mail : asengupta@iitgn.ac.in	Fast interpolation of inspiral template bank for coherent searches for gravitational waves, etc.
202.	<b>Prof. T.R. Seshadri</b> Department of Physics and Astrophysics University of Delhi New Delhi - 110 007	Phone : (011) 27667061 (O) (011) 27315329 (R) 9971954775 (M) Fax : (011) 27667061 E-mail : trs@associates.iucaa.in, seshadri.tr@gmail.com	CMBR, Cosmology.
203.	<b>Dr. Kannabiran Seshasayanan</b> Assistant Professor Department of Applied Mechanics and Biomedical Engineering Indian Institute of Technology Chennai – 600036.	Phone : (0322) 2284862 (O) 9360028322 (M) E-mail : s.kannabiran@gmail.com	Nonlinear dynamics, Turbulence, Astrophysics, Geophysical fluid dynamics, Non-equilibrium statistical mechanics
204.	<b>Dr. Geetanjali Sethi</b> Department of Physics St. Stephen's College University of Delhi Delhi – 110 007.	Phone : (011) 27667271 (O) : 8527516516 (M) E-mail : getsethi@ststephens.edu	Cosmology, Astronomy

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
205.	<b>Dr. Mohd Shahalam</b> Integral University Kursi Road Lucknow - 226 026 Uttar Pradesh	Phone : 9839086086(O) 9756366519 (M) E-mail : mohdshahamu@gmail.com	Dark Energy, Modified Gravity, Cosmic Inflation, Loop Quantum Cosmology and Gravitational Waves
206.	<b>Dr. Aishawnnya Sharma</b> Department of Physics Bahona College Bahona - 785 101 Assam.	Phone : 9957927147 E-mail : sharmaaishawnnya@gmail.com aish@associates.iucaa.in	My research focuses on multiwavelength imaging and spectroscopic observations of the solar atmosphere to understand the nature, and spatio- temporal evolution of different wave modes in different layers of the solar atmosphere. Different waves in the solar atmosphere (such as slow, fast magnetoacoustic waves, and Alfven waves) are detected by analysing the variations in intensity. Doppler velocity, and line widths of spectral lines. Propagation of compressional waves cause variations in the intensity of the medium. Whereas, the transverse incompressible waves like Alfven waves do not show any intensity variation. They cause broadening of spectral lines, which can be measured from the spectroscopic observations of line widths of spectral lines. I study the spatio-temporal variations are dicharacterize them by different time-series analysis techniques. Further, I do spectroscopic studies to understand the propagating medium/structures in details and its effect as well as the response to the perturbations. Further, I do spectrometor (EIS) Observatory (SDD) and Extreme-Ultraviolet Imaging Spectrometer (EIS)
207.	<b>Dr. Ranjan Sharma</b> Department of Physics Cooch Behar Panchanan Barma University Vivekananda Street Cooch Behar - 736 101 West Bengal	Phone : (03582) 230218 (O) (03561) 255050 (R) 9832096288 (M) Fax : (03582) 224011 E-mail : rsharma.jpg@gmail.com rsharma@associates.iucaa.in	Relativistic Astrophysics.
208.	<b>Dr. Rathin Sarma</b> Assistant Professor Department of Physics Rabindranath Tagore University Hojai - 782 435 Assam	Phone : 9435537925 (M) E-mail: sharma.rathin@gmail.com	X-Ray data analysis and understanding the accretion disc physics around the SMBH of AGN. I am particularly interested in long term variability of highly variable Narrow Line Seyfert 1 (NLS1) galaxy. I have been studying the hot ISM of the Milky Way also.
209.	<b>Dr. Umesh Kumar Sharma</b> Associate Professor Department of Mathematics GLA University Mathura - 281 406 Uttar Pradesh	Phone : 7055510538 (O) 9719431820 (M) E-mail : sharma.umesh@gla.ac.in	Dark Energy Modified gravity theory General Relativity and cosmology Wormhole
210.	Mr. Md. Salim Md. Harun Shekh S. P. M. Science and Gilani Arts Commerce College Ghatanji, Dist. Yavatmal – 445 301.	Phone : 8806471770 (M) E-mail : da_salim@rediff.com	General theory of relativity; Modified gravity; Dark energy; Dark matter; Cosmology.
211.	<b>Dr. Amit Shukla</b> Discipline of Astronomy, Astrophysics and Space Engineering (DAASE) Indian Institute of Technology Khandwa Road, Simrol Indore - 453 552	Phone : (0731) 2438700 (Extn. 3213) 9579293880 E-mail : amit.shukla@iiti.ac.in	My main area of research includes Gamma-ray Astronomy, Active galactic nuclei, Blazars, Radio galaxies, Seyfert Galaxies, Pulsars. I mainly use multi- wavelength data from a few telescopes, including FACT, MAGIC, Fermi- LAT, Swift-XRT, AstroSaT, NuStar, to study Time-domain and Multi- wavelength Astronomy from Astrophysical sources. Moreover, I also study Particle acceleration and Jet launching mechanisms in astrophysical sources. The blazars are the ideal laboratories to study the particle acceleration and jet launching mechanisms as the innermost regions of an AGN and its jet, as the dominant part of the observed non-thermal emission from the AGN originates close to the central engine. Thus the flux variability can shed light on this very innermost region of jets which is well beyond the current imaging capabilities of telescopes in any part of the electromagnetic spectrum. In addition to above mention topics, I also work on the calibration and development of Atmospheric Cherenkov Telescope and Detectors. Recently I have also started developing machine learning tools for Time-domain Astronomy.
212.	<b>Dr. Ashutosh Singh</b> Centre for Cosmology, Astrophysics and Space Science GLA University Mathura - 281406 Uttar Pradesh	Phone : (05662) 250761 (O) 9628324945 (M) E-mail : ashuverse@gmail.com	Bouncing and cyclic cosmologies; Relativistic cosmology; Modified gravity; Dynamical systems in cosmology; Thermodynamic aspects of universe; Active galactic nuclei (blazars)

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
213.	<b>Dr. Alkendra Singh</b> UGC-Assistant Professor Department of Physics Institute of Science Banaras Hindu University Varanasi - 221 005	Phone : 8765476544 (M) E-mail: alkendra@gmail.com alkendra@associates.iucaa.in	Solar and Plasma Astrophysics, Magneto- hydrodynamic, Space- based observations of the Sun.
214.	<b>Dr. Dharm Veer Singh</b> Assistant Professor GLA University Department of Physics Room No. 415, Academic Block 8 Mathura – 281 406	Phone : 9953171095 (M) E-mail : veerdsingh@gmail.com	Classical and Quantum gravity, Modified theories of gravity, Black Hole solutions, Black hole thermodynamics
215.	<b>Prof. Gyan Prakash Singh</b> Department of Mathematics Visvesvaraya National Institute of Technology Nagpur - 440 010 Maharashtra	Phone : (0712) 2801356 (O) (0712) 2801386 (R) 9423684625 (M) E-mail : gpsingh@mth.vnit.ac.in gps.math2015@gmail.com	General Relativity and Cosmology.
216.	<b>Prof. Harinder Pal Singh</b> Department of Physics and Astrophysics University of Delhi New Delhi - 110 085	Phone : (011) 27667793 (O) (011) 27567366 (R) 9810248042 (M) Fax : (011) 27667061 E-mail : singh@associates.iucaa.in, hpsingh.du@gmail.com	Stellar Magnetic Fields, Stellar Evolution.
217.	<b>Dr. Heisnam Shanjit Singh</b> Department of Physics Rajiv Gandhi University Rono Hills, Papum Pare - 791 112 Arunachal Pradesh	Phone : (0360) 2278572 (O) 7308260563 (M) E-mail : heisnam.singh@rgu.ac.in heisnam@associates.iucaa.in	Black holes and Cosmology.
218.	<b>Prof. Suprit Singh</b> Department of Physics Indian Institute of Technology New Delhi – 110 016	Phone : 9560282124 (M) E-mail : supritsingh@gmail.com	Gravitation and Cosmology, Quantum Field Theory in Curved Spacetimes, Quantum Gravity, Galactic and Extragalactic Astrophysics, Computer
219.	<b>Dr. Monika Sinha</b> Department of Physics Indian Institute of Technology Jodhpur Room No. 333 Jodhpur - 342037 Rajasthan	Phone : (0291) 2801604 (O) 7568875770 (M) E-mail : ms@iitj.ac.in monika@associates.iucaa.in	Compact objects.
220.	Dr. Surendra Nadh Somala Associate Professor Indian Institute of Technology Hyderabad - 502 285 Telangana	Phone : (040) 23016313 (O) : 9398213383 (M) E-mail : surendra@iith.ac.in surendra@associates.iucaa.in	Engineering seismology, computational geophysics, gravity perturbations due to seismic wavefield.
221.	Dr. Sourav Sur Room 168, MS Block Department of Physics and Astrophysics University of Delhi (North Campus) New Delhi – 110 007	Phone : (011) 27667793 (O) : 9999246718 (M) E-mail : sourav@physics.du.ac.in	General Relativity, Cosmology, Black- hole physics, and the formulation of modified or alternative gravity theories of various sort, as well as the compact extra-dimensional (brane-world) gravity theories

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
222.	<b>Prof. Parijat Thakur</b> Department of Pure and Applied Physics Guru Ghasidas Central University Bilaspur - 495 009 Chattisgarh	Phone : (07752) 260007 (O) (0788) 4017785 (R) 7587096051 (M) Fax : (07752) 260148 E-mail : parijatthakur@yahoo.com parijat@associates.iucaa.in	Investigating Transiting Exoplanets, X-Ray Studies of Galactic Binaries, Galactic Structure and Dynamics, Structure and Evolution of Barred Galaxies
223.	<b>Dr. Arun Varma Thampan</b> St. Joseph's University P.O. Box 27094 36 Lalbagh Road Bengaluru - 560 027	Phone : (080) 22274079 (O) (080) 25834800 (R) 9449835496 (M) E-mail : athampan@gmail.com arun@associates.iucaa.i n	General Relativity, Modelling of observational data.
224.	Dr. Vithal P. Shet Tilvi Department of Physics Government College Khandola Directorate of Higher Education SCERT Building Porvorim Goa - 403 521	Phone : 7020783354 E-mail : vtilvi@gmail.com vithal.tilvi@associates.iucaa.in	My research interest is focussed on two frontier research areas : (1) understanding the galaxy formation and evolution of the earliest galaxies in the universe, and (2) probing the epoch of reionizationa <sup>34</sup> 'the transition from a completely neutral intergalactic medium (IGM) to an ionized IGM, within the first billion years. The earliest galaxies are the building blocks of present-day, nearby galaxies. Therefore, for a complete understanding of galaxy formation and evolution, it is essential to observe and study the earliest objects in the universe. The epoch of reionization, on the other hand, is one of the most important events in the history of our universe because it had a lasting impact on the evolution of the universe itself. Both these areas have therefore gained a significant attention in recent years, and are among the top science drivers for all upcoming observatories including the the Thirty Meter Telescope (TMT), James Webb Space Telescope (WST), the Giant Magellan Telescope (GMT), and the European Extremely Large Telescope (E-ELT).
225.	<b>Dr. Sunil Kumar Tripathy</b> Department of Physics Indira Gandhi Institute of Technology Sarang Dhenkanal Dhenkanal - 759 146 Odisha	Phone : (06768) 267025 (O) 8280295995 (M) E-mail : tripathy_sunil@rediffmail.com sktripathy@associates.iucaa.in	Cosmology, Relativity and Gravitation: Late time cosmic acceleration- Dark energy models, Alternative theories of gravity, Nuclear Physics: Equation of state of Nuclear Matter, Neutron stars and Proto Neutron star.
226.	<b>Dr. Vinutha Tummala</b> Department of Applied Mathematics Andhra University Visakhapatnam - 530 003 Andhra Pradesh	Phone : (0891) 2844524 (O) (0891) 4800126 (R) 9490235319 (M) E-mail : vinuthatummala@gmail.com vinutha@associates.iucaa.in	Einstein's theory of gravitation, scalar tensor theories of gravitation and dark energy cosmological models in order to explain the expanding nature of the Universe and other properties.
227.	<b>Dr. Rashmi Uniyal</b> Department of Physics Government Degree College Barkot Uttarkashi Uttarakhand 249141	Phone : 8006733214 (M) E-mail : runiyal687@gmail.com uniyal@associates.iucaa.in	Classical Gravity and related phenomenon, geodesic structure, orbit structure and kinematics of geodesic flows around given spacetime backgrounds, weak and strong gravitational lensing and kinematics of deformation of null geodesics around various compact objects along with accretion phenomenon associated with these
228.	<b>Dr. Sanil Unnikrishnan</b> Department of Physics St. Stephen's College University Enclave New Delhi - 110 007	Phone : (011) 22503058 (R) 8860153808 (M) E-mail : sanil.unni@gmail.com	Cosmology in general, Dark Energy and Dark Matter Inflation and Early Universe Cosmology, Cosmological Perturbation Theory, Modified theory of gravity as an alternative to dark energy.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
229.	<b>Dr. Sudhaker Upadhyay</b> Department of Physics K.L.S. College Nawada (A Constituent Unit of Magadh University Bodh Gaya) Bihar - 805 110	Phone: 8090976139 (O) 7477780999 (M) E-mail :sudhakerupadhyay@gmail.com	Galaxy clustering and structure formation of universe
230.	<b>Prof. Anisul Ain Usmani</b> Department of Physics Aligarh Muslim University Aligarh - 202 002 Uttar Pradesh	Phone : (0571) 2701001 (O) (0571) 2721829 (R) 9412275671 (M) Fax : (0571) 2701001 E-mail : anisul@associates.iucaa.in, anisul.usmani@gmail.com	Many Body Theories, Physics of Strangeness.
231.	<b>Dr. Jithesh V</b> Department of Physics and Electronics Christ (Deemed To Be University) Dharmaram College P.O Hosur Road Bengaluru - 560 029	Phone :(080) 40129100 (O) 9497408160 (M) E-mail : jithesh.v@christuniversity.in	X-ray Astronomy, Spectral and timing studies of X-ray binaries and ultra-luminous X-ray sources, multi-wavelength study of active galactic nuclei and blazars.
232.	<b>Dr. Nilkanth Dattatray Vagshette</b> Department of Physics & Electronics Maharashtra Udaygiri Mahavidyalaya Udgir Latur - 413 517 Maharashtra	Phone : (02385) 256052 (O) 9975909979 (M) E-mail : nilkanth1384@gmail.com	<ol> <li>AGN feedback mechanism in ICM/IGM</li> <li>Shocks and cold fronts in clusters</li> <li>X-ray binary stars in early type galaxies</li> <li>Dust properties of early type galaxies</li> </ol>
233.	<b>Dr. Bhargav Pradeep Vaidya</b> Discipline of Astronomy, Astrophysics and Space Engineering Indian Institute of Technology Onyx 118, Silver Springs Phase 2 Bypass Road, Pathar Mundla Indore - 452 020 Madhya Pradesh	Phone: 7324306538 (O) 731494005 (R) 9998983564 (M) E-mail : bvaidya@iiti.ac.in	Computational Fluid Dynamics: Hydrodynamics, Magneto- hydrodynamics & Radiative transfer Theoretical star formation: Accretion disk physics, Jets and Outflow formation and associated instabilities Particle Acceleration in AGN jets : Modeling Non-Thermal spectral signatures Inter-Stellar Medium : Shock-Cloud Interaction, Collapse of molecular cores, Shock induced chemistry. Astrophysical Code Development: MPI Parallel Programming Visualization and Data
234.	<b>Prof. Murli Manohar Verma</b> Department of Physics University of Lucknow Lucknow - 226 007 Uttar Pradesh	Phone : (0522) 2740467 (O) (0522) 2740140 (R) 9415725291 (M) E-mail : sunilmmv@yahoo.com murli@associates.iucaa.in	Cosmology: Dynamics and diagnostics of the Interacting dark energy models especially quintessence and tachyonic field models.
235.	<b>Dr. Jaswant Kumar Yadav</b> Department of Physics and Astrophysics Central University of Haryana Jant-Pali, Mahendergarh Haryana - 123 031	Phone : (01285) 260157 (O) : 7696951306 (M) E-mail : jaswantkyadav@gmail.com jaswant@associates.iucaa.in	Formation and Evolution of galaxies, Feedback Processes in galaxy formation, Chemical etc.

No.	Name and Address	Phone and E-mail	<b>Research Interests</b>
236.	Mrs. Nitin Yadav Department of Physics Indian Institute of Science Education and Research Thiruvananthapuram – 695 551 Kerala	Phone : (0471) 2778325 (O) 9873553413 (M) E-mail : nitinyadav@iisertvm.ac.in	Magnetohydrodynamics (MHD): Theory and simulations, Solar atmosphere and radiative transfer, Waves and mode transformation processes, Solar plasma dynamics and heating, Space plasma physics: Magnetic reconnection and energetic event
237.	<b>Dr. Lalthakimi Zadeng</b> Department of Physics Mizoram University Aizawl - 796 004 Mizoram	Phone : (0389) 2330522 (O) 9436152904 (M) E-mail : kimizadeng@gmail.com	Spectral time studies of X-ray Binaries