

| PS-4 (Astronomy and Astrophysics) - Oral presentation schedule for NSSS 2024 | | | | | |
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| No | Abstract ID | Name | Affiliation | Title | Email ID |
| OS1: 26/02/2024 13:30 - 14:30 : Black Holes - Observations (Chair: Ramadevi M. C.) | | | | | |
| 1 | PS4_009 | Jithesh. V | Department of Physics and Electronics, CHRIST (Deemed to be University), Bengaluru | Exploring the Spectro-Timing Properties of BHXRBs Using AstroSat and NICER | jithesh.v@christuniversity.in |
| 2 | PS4_016 | Abhay Kumar | Physical Research Laboratory, Ahmedabad, India | Hard X-ray spectral states in Cygnus X-1 and its polarisation dependence using AstroSat | rmrsayadav@gmail.com |
| 3 | PS4_059 | Seshadri Majumder | Indian Institute of Technology Guwahati, Space Astronomy Group, ISITE Campus, U. R. Rao Satellite Centre | Polarimetric properties of black hole X-ray binaries with IXPE and XPOsat prospects | smajumder@iitg.ac.in |
| 4 | PS4_070 | Sreetama Das Choudhuri | Department of Physics, Indian Institute of Technology Guwahati | In quest of disc-jet connection in black hole X-ray binaries: A perspective of wide-band spectro-temporal results | d.sreetama@iitg.ac.in |
| OS2: 26/02/2024 14:30 - 15:30 : Black Hole and Gravitation - Theory (Chair: Broja Dutta) | | | | | |
| 5 | PS4_050 | Monu Singh | Indian Institute of Technology Guwahati | Properties of relativistic hot accretion flow around rotating black hole with radially varying viscosity | monu18@iitg.ac.in |
| 6 | PS4_068 | Raj Kishor Joshi | ARIES | Effect of plasma composition on the dynamics of relativistic jets | joshirajkishor28@gmail.com |
| 7 | PS4_072 | Camelia Jana | Indian Institute of Technology Guwahati | Estimation of mass outflow rates from relativistic magnetized accretion disc around rotating black holes | camelia_jana@iitg.ac.in |
| 8 | PS4_079 | Soumen Mondal | Jadavpur University, Kolkata | How far Environmental effect can influence the parameter estimation of E/IMRI's in LISA Band : A study for the case of accretion disk. | crabhorizon@gmail.com |
| 9 | PS4_003 | Arun Kenath | Department of Physics and Electronics, CHRIST (Deemed to be University), Bangalore, India | MOND, MONG and the Oort cloud | kenath.arun@christuniversity.in |
| OS3: 27/02/2024 12:00 - 13:00 : Neutron Stars - Observations (Chair: Jithesh V.) | | | | | |
| 10 | PS4_001 | Suchismito Chattopadhyay | Government Girls' General Degree College, IUCAA | Study of the Spectral and Temporal evolution of GX 340+0 along the Z track. | suchismitochattopadhyay@gmail.com |
| 11 | PS4_002 | Rahul Sharma | Raman Research Institute | AstroSat view of Neutron stars of different magnetic fields | rsharma@rri.res.in |
| 12 | PS4_040 | Manoneeta Chakraborty | Indian Institute of Technology Indore | Probing thermonuclear flares on neutron stars and their interaction with accretion | manoneeta@iiti.ac.in |
| OS4: 27/02/2024 14:00 - 15:30 : Stars and Galaxy (Chair: Manoneeta Chakraborty) | | | | | |
| 13 | PS4_092 | Shashikiran Ganesh | Physical Research Laboratory | Mapping the dust and the magnetic field in the disc of the Milky Way using open cluster optical polarimetry | shashi@prl.res.in |
| 14 | PS4_015 | Rishabh Singh Teja | Indian Institute of Astrophysics (IIA), II Block, Koramangala, Bengaluru-560034, Karnataka, India | Nearest supernova in decade 2023ixf: Rapid multi-wavelength followup & analysis using space and ground-based facilities | rishabh.teja@iiap.res.in |
| 15 | PS4_044 | Harshal Raut | Department of Astronomy, Astrophysics and Space Engineering, Indian Institute of Technology Indore, Indore 452020, India | Multiple Component Stellar Disk in Galaxies | harshal1908.hr@gmail.com |
| 16 | PS4_013 | Subhajit Kar | S.N. Bose National Centre for Basic Sciences, Kolkata; Christ University, Bengaluru, India | Unveiling Pulsational Instabilities: Exploring Radial Motion Dynamics in the Stellar Winds of a WC-Late Type Star | subhajit0596@gmail.com |
| 17 | PS4_019 | Hema Banagere Prakash | Indian Institute of Astrophysics, Bengaluru | Detection and Measurement of Helium-Enrichment in Giants | hema.bp@iiap.res.in |
| 18 | PS4_093 | Akhila D | Department of Physics and Electronics, CHRIST(Deemed to be University),Bangalore | Mid IR forbidden neon lines in Herbig Ae/Be stars | akhilakrishnapriya99@gmail.com |
| OS5: 28/02/2024 12:00 - 13:00 : AGN (Chair: Shashikiran Ganesh) | | | | | |
| 19 | PS4_097 | B Ananthamoorthy | Manipal Centre for Natural Sciences, Centre of Excellence, Manipal Academy of Higher Education, Manipal, Karnataka-576104 | Study of AGN jet interaction on nearby galaxies in NGC 315 | anantha.moorthy@learner.manipal.edu |
| 20 | PS4_045 | Broja G Dutta | Department of Physics, RBC College, Naihati, North 24 Parganas, W.B, PIN 743165 | The Origin of Hard/Soft lag in Galactic black hole binaries and bare-type AGN: Implication on accretion disk geometry | brojadutta@gmail.com |
| 21 | PS4_086 | Sumana Nandi | Manipal Centre for Natural Sciences, Centre of Excellence, Manipal Academy of Higher Education | Finding the evolutionary link in between ULIRGs and radio galaxies | sumana.nandi@manipal.edu |
| 22 | PS4_104 | Dr. Aswathy S | Providence Women's College, Calicut | Study of Central Light Concentration in Nearby Early-type Galaxies with Detectable Radio Emission | aswathysahaj@gmail.com |
| OS6: 28/02/2024 14:00 - 15:30 : Radio Observations (Chair: Abhirup Dutta) | | | | | |
| 23 | PS4_074 | Anshuman Tripathi | Department of Astronomy, Astrophysics and Space Engineering, IIT Indore, Simrol, Indore, 453552, Madhya Pradesh, India | Extracting the HI 21cm Power Spectrum using Artificial Neural Networks | phd2001121001@iiti.ac.in |
| 24 | PS4_011 | Shashank Shekhar Pandey | Department of Astrophysics and High Energy Physics, S. N. Bose National Centre for Basic Sciences, Block – JD, Sector – III, Salt Lake, Kolkata - 700106 | Analyzing the 21-cm signal brightness temperature in the Universe with inhomogeneities | shashankpandey7347@gmail.com |

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| 25 | PS4_020 | Rashmi Sagar | Indian Institute of Technology Indore, Indore-452020, India. | Characterizing the Radio Background during the Epoch of Reionization using uGMRT Band-2 : ELAIS-N1 deep field observation | rashmisagar4546@gmail.com |
| 26 | PS4_056 | Suvedha Suresh Naik | Manipal Centre for Natural Sciences, Centre of Excellence, Manipal Academy of Higher Education, Dr. T.M.A. Pai Planetarium Building, Manipal 576 104, Karnataka, India | Imprints of the cosmic inflation in the redshifted 21 cm signal | suvedha.snaik@gmail.com |
| 27 | PS4_065 | Himanshu Grover | IIT Roorkee India | Pulsar Glitch monitoring with the uGMRT and the ORT | himanshu_g@ph.iitr.ac.in |
| 28 | PS4_101 | Swarna Chatterjee | Indian Institute of Technology Indore | Exploring the extended radio structures in merging galaxy clusters | phd1901121010@iiti.ac.in |
| OS7: 29/02/2024 12:00 - 13:00 : Fast Transients (GRB) (Chair: Debbijoy Bhattacharya) | | | | | |
| 29 | PS4_014 | Pallavi Saraf | Indian Institute of Astrophysics, Bangalore | Can a single site alone explain the r-process enrichment in the Galaxy? | pallavi.saraf@iiap.res.in |
| 30 | PS4_073 | Amit Kumar | Indian Institute of Technology, Guwahati | Study of Neutrino dominated accretion flow around rotating black hole | kamit@iitg.ac.in |
| 31 | PS4_029 | Utkarsh Pathak | Department of Physics, IIT Bombay, Powai, Mumbai - 400076, India | GRB230812B - Exploring Jet Physics and Polarization for an Extremely Bright Gamma Ray Burst | utkarshpathak.07@gmail.com |
| 32 | PS4_109 | Ramadevi M C | 1 U.R. Rao Satellite Centre, Bangalore, 2 INAF – Cagliari Astronomical Observatory | AstroSat Observations of a repeating FRB 20180916B | mc.ramadevi@gmail.com |
| OS8: 26/02/2024 14:00 - 15:30 : Star Formation and Astro-Chemistry (Chair: Bhala S.) | | | | | |
| 33 | PS4_094 | Dr. Ragav Ramachandra | Physical Research Laboratory, Ahmedabad, India | Etching of ISM cold dust – A conceivable dust destruction process in astrochemical icy conditions | ragav.kasak@gmail.com |
| 34 | PS4_022 | Soumita Chakraborty | S. N. Bose National Centre for Basic Sciences, Kolkata, India | Studies of Star-forming Region: Sh2-88 | soumitach25@gmail.com |
| 35 | PS4_080 | Sipra Hota | Indian Institute of Astrophysics, Indian Institute of Astrophysics, Macquarie University | Deciphering the hierarchical star formation within the Small Magellanic Cloud using the UVIT/AstroSat. | siprahota1997@gmail.com |
| 36 | PS4_096 | Arijit Roy | Physical Research Laboratory, Ahmedabad, India | Fate of PAHs behind the shock front | arijit.roybwn11@gmail.com |
| 37 | PS4_042 | shivam kumaran | EPSA, Space Applications Centre, ISRO Ahmedabad | Identification of filamentary structure in the Interstellar medium using Terahertz observations. | kumaranshivam101@gmail.com |
| 38 | PS4_083 | Dr. Dipen Sahu | Physical Research Laboratory, India | Digging into fundamental processes of star formations inside prestellar cores and its connection with astrochemistry | dipenthink@gmail.com |
| OS9: 01/03/2024 12:00 - 13:00 : Instrumentation (Chair: Shyama Narendranath) | | | | | |
| 39 | PS4_036 | Manish Chauhan | Space Applications Centre, ISRO, Ahmedabad | Site characterisation of Hanle for observations in the Terahertz regime | manish.chauhan@sac.isro.gov.in |
| 40 | PS4_060 | Mudit Srivastava | Physical Research Laboratory, Ahmedabad | Development of ProtoPol – a medium resolution echelle spectro-polarimeter for PRL Telescopes | mudit@prl.res.in |
| 41 | PS4_087 | Anuraag Arya | Department of Physics IIT Bombay, Powai, Mumbai – 400076, | Demonstration of Compton Imaging in Hard X-rays | arya.a@iitb.ac.in |
| 42 | PS4_107 | Debbijoy Bhattacharya | Manipal Centre for Natural Sciences, Centre of Excellence, Manipal Academy of Higher Education, Manipal 576104, India | A Wide Field X-ray Spectroscopic mission: A concept design | debbijoy.b@manipal.edu |