

IUCAA Introductory Summer School in Astronomy and Astrophysics 2025

Date/Time	9:45-11:00	11:30-12:45	14:15-15:30	16:00-17:15
12 May	Introductory Astronomy Raghunathan Srianand	Optical Astronomical Techniques A. N. Ramaprakash	Stellar Structure & Evolution Anupam Bhardwaj	Hands-on: MESA Stellar Evolution Susmita Das , Prashant Nishad
13 May	Introductory Astronomy Raghunathan Srianand	Optical Astronomical Techniques A. N. Ramaprakash	Stellar Structure & Evolution Anupam Bhardwaj	Hands-on: MESA Stellar Evolution Susmita Das , Prashant Nishad
14 May	Introductory Astronomy Raghunathan Srianand	The Sun Durgesh Tripathi	Stellar Structure & Evolution Anupam Bhardwaj	Hands-on: MESA Stellar Evolution Susmita Das , Prashant Nishad
15 May	General Relativity Shasvath Kapadia	The Sun Durgesh Tripathi	Stellar Structure & Evolution Anupam Bhardwaj	IUCAA Project: Optical Observatories TMT – A. N. Ramaprakash
16 May	General Relativity Shasvath Kapadia	The Sun Durgesh Tripathi	Galaxies /IGM Sowgat Muzahid	Interaction: IUCAA students and PDFs
19 May	General Relativity Shasvath Kapadia	Galactic Dynamics Kanak Saha	Galaxies /IGM Sowgat Muzahid	Hands-on: Surface Photometry of Galaxies M. Kataria , P. Pandey , S. Maulick
20 May	General Relativity Shasvath Kapadia	Galactic Dynamics Kanak Saha	Galaxies /IGM Sowgat Muzahid	Hands-on: Surface Photometry of Galaxies M. Kataria , P. Pandey , S. Maulick
21 May	Atomic Clocks Subhadeep De	Galaxies – UV Deep fields Kanak Saha	Active Galactic Nuclei Vaidehi Paliya	Visit: PQM and Instrumentation Lab
22 May	Atomic Clocks Subhadeep De	Pulsars Prakash Arumugasamy	Active Galactic Nuclei Vaidehi Paliya	IUCAA Project: Aditya-L1 Durgesh Tripathi
23 May	Atomic Clocks Subhadeep De	Pulsars Prakash Arumugasamy	Gamma-ray Astronomy Vaidehi Paliya	Visit: PQM and Instrumentation Lab

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26 May	Atomic Clocks Subhadeep De	Interstellar Medium Rajeshwari Dutta	X-ray Astronomy & Astrosat Gulab Dewangan	Hands-on: X-ray data analysis Tanuman Ghosh, Akash Garg
27 May	Radiative Processes Dipanjan Mukherjee	Radio Astronomy Rajeshwari Dutta	X-ray Astronomy & Astrosat Gulab Dewangan	Hands-on: X-ray data analysis Tanuman Ghosh, Akash Garg
28 May	Radiative Processes Dipanjan Mukherjee	Radio Astronomy Rajeshwari Dutta	Compact Stars Debarati Chatterjee	Visit: Astrosat SSC
29 May	Radiative Processes Dipanjan Mukherjee	Black Holes Sanjeev Dhurandhar	Compact Stars Debarati Chatterjee	IUCAA Project: Astrosat Gulab Dewangan
30 May	Radiative Processes Dipanjan Mukherjee	Black Holes Sanjeev Dhurandhar	Compact Stars Debarati Chatterjee	Visit: Astronomy Centre for Educators
2 June	Cosmology Aseem Paranjape	JWST & High Redshift Galaxies Ajit Kembhavi	JWST & High Redshift Galaxies Ajit Kembhavi	Hands-on: Statistics using Python Sourav Das, Shreya Mukherjee
3 June	Cosmology Aseem Paranjape	Artificial Intelligence in Astronomy Ajit Kembhavi	Artificial Intelligence in Astronomy Ajit Kembhavi	Hands-on: Statistics using Python Sourav Das, Shreya Mukherjee
4 June	Cosmology Aseem Paranjape	Gravity Naresh Dadhich	Fluids & Plasmas Nishant Singh	Visit: IUCAA SciPOP
5 June	Cosmology Aseem Paranjape	Gravity Naresh Dadhich	Fluids & Plasmas Nishant Singh	IUCAA Project: Rubin LSST Surhud More
6 June	Galaxies with IFU Edmund C. Herenz	Gravitational Wave Searches Apratim Ganguly	Fluids & Plasmas Nishant Singh	GW Parameter Estimation Apratim Ganguly

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9 June	Gravitational Lensing Anupreeta & Surhud More	Galaxies with IFU Edmund C. Herenz	Hands-on: LIGO India demo models Nilaksha Barman, Pranjal Tambe, Rajesh Maiti	Hands-on: LIGO India demo models Nilaksha Barman, Pranjal Tambe, Rajesh Maiti
10 June	Gravitational Lensing Anupreeta & Surhud More	Gravitational Waves Sanjit Mitra	GW Instrument Science Manasadevi Thirugnanasambandam	GW Instrument Science Manasadevi Thirugnanasambandam
11 June	Gravitational Lensing Anupreeta & Surhud More	Gravitational Waves Sanjit Mitra	Hands-on: GW Data Analysis Anirban Kopty	IUCAA Project: LIGO Sanjit Mitra
12 June	Gravitational Lensing Anupreeta & Surhud More	Gravitational Waves Sanjit Mitra	Hands-on: GW Data Analysis Anirban Kopty	Visit: GW Labs
13 June	Presentations by ISSAA participants			

- Lectures will be conducted in Bhaskara 3 unless otherwise informed.
- Hands-on sessions will be conducted in Seminar Room B3.
- For visits to labs or other buildings, instructors will meet participants outside of Bhaskara 3 and guide them to the respective venue.
- Tea breaks will be during 11:00-11:30 and 15:30-16:00.
- Lunch break will be during 12:45-14:15.