

ATSOAA 2025 - Programme Schedule				
Time	Session	Speaker	Title	Session Chair
Week 1				
April 21, 2025 (Monday) - Basics of Astronomy				
9:00 AM	Welcome	Registration		Pritam Das
9:30 AM - 9:35 AM		Welcome Address by the Director		
9:35 AM - 9:45 AM	Basic Astronomy	Saurabh	An Overview of ATSOAA 2025	
9:45 AM - 10:30 AM		Jeewan C. Pandey	What is Astronomy: A Brief Introduction	
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	Basic Astronomy	Brijesh Kumar	An Overview of Optical Astronomy	Rishi C
12:00 PM - 1:00 PM	Basic Astronomy	Saurabh	Detectors for Optical and IR Astronomy	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Basic Astronomy	Alok C. Gupta	Astronomical Coordinate Systems	Mamta
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM - 5:00 PM	Demo Session	Tarak Chand, Mamta	Tools of Optical Astronomy - Photometry	Anshika Gupta
5:00 PM - 6:00 PM	Project Discussion	All Project Guides	Discussions with Project Guides	Khushboo Sharma
Tea/Coffee Break (6:00 PM - 6:30 PM)				
6:30 PM - 8:00 PM	Visit	Anshika Gupta, Khushboo Sharma	Visit to 40-inch Sampurnanand Telescope	-----
April 22, 2025 (Tuesday) – Basics of Atmospheric Science				
9:30 AM - 10:30 AM	Atmospheric Science	Manish K Naja	Introduction to air pollution, climate change and observational methods	Vikrant Tomar
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM- 12:00 PM	Atmospheric Science	Priyanka Srivastava	Science of atmospheric aerosols	Subhajit Debnath
12:00 PM – 01:00 PM	Atmospheric Science	Umesh C. Dumka	Observational methods for atmospheric aerosols	

ATSOAA 2025 - Programme Schedule

Time	Session	Speaker	Title	Session Chair
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Data Analysis - I	Project Guides		-----
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM – 4:30 PM	ARIES Colloquium	Priyanka Chaturvedi	From Jupiters to Earth's - Exoplanets and beyond	
4:30 PM - 6:30 PM	Data Analysis-II	Project Guides		-----
April 23, 2025 (Wednesday) - Stellar Systems				
9:30 AM - 10:30 AM	Stellar Systems	Neelam Panwar	Formation and Evolution of Stars	Mamta
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	Stellar Systems	Jeewan C. Pandey	Stellar Structure	Arjun Dawn
12:00 PM - 01:00 PM	Stellar Systems	Ramakant Singh Yadav	Stellar Motions	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 AM - 03:00 PM	Galaxy	Govind Nandkumar	Galactic Structure	Rishi C
Tea/Coffee Break (3:00 PM - 03:30 PM)				
3:30 PM - 5:00 PM	Demo Session	Rishi C, Jincen Jose	Tools of Optical Astronomy - Spectroscopy	Anshika Gupta
5:00 PM – 6:30 PM	Data Analysis	Project Guides		-----
April 24, 2025 (Thursday) - Solar Physics and Atmospheric Thermodynamics				
9:30 AM - 10:30 AM	Solar Physics	Vaibhav Pant	An Introduction to the Sun and Space Weather	Pritam Das
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	Solar Physics	Krishna Prasad	An Introduction to the Spectroscopy of the Sun	Rohan Bose
12:00 PM - 1:00 PM	Solar Physics	Vaibhav Pant	Aditya-L1 Space mission	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 2:45 PM	Atmospheric Thermodynamics	T. R. Seshadri	Thermodynamics of the atmosphere	Vikrant Tomar
2:45PM - 3:30 PM	Demo Session	T. R. Seshadri	Thermodynamics of the atmosphere	

ATSOAA 2025 - Programme Schedule

Time	Session	Speaker	Title	Session Chair
Tea/Coffee Break (3:30 PM - 4:00 PM)				
4:00 PM - 6:30 PM	Data Analysis	Project Guides		-----
April 25, 2024 (Friday) - High Energy Astrophysics & Atmospheric Remote Sensing				
9:30 AM - 10:30 AM	High Energy Astrophysics	Jagdish C. Joshi	Radiative Processes in Astrophysics	Khushboo Sharma
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	High Energy Astrophysics	Kuntal Misra	An Introduction to Transients- GRB and Supernovae	Sarvesh K Yadav
12:00 PM - 01:00 PM	High Energy Astrophysics	Haritma Gaur	An Introduction to Active Galactic Nuclei (AGN)	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 2:45 PM	Space data	Shuchita Srivastava	Satellite remote sensing of trace gases	Vikrant Tomar
2:45 PM - 3:30 PM	Demo Session	Shuchita Srivastava	Satellite remote sensing of trace gases	
Tea/Coffee Break (3:30 PM - 4:00 PM)				
4:00 PM - 5:00 PM	ARIES Colloquium	T. R. Seshadri	Universe today: What we understand and what we do not?	
Director's Dinner (7:00 PM onwards)				
April 26, 2025 (Saturday) - Visit and Data Analysis				
9:30 AM - 11:30 AM	Visit	Pritam Das, Rohan Bose, Bablu Mandal	Sunspot Viewing	-----
Tea/Coffee Break (11:30 AM - 12:00 AM)				
12:00 PM - 1:00 PM	Data Analysis	Project Guides		-----
Lunch Break (1:00 PM - 2:00 PM)				
April 27, 2025 (Sunday) - Devasthal Trip				
Day Trip to ARIES Devasthal Observatory				

ATSOAA 2025 - Programme Schedule

Time	Session	Speaker	Title	Session Chair
Week 2				
April 28, 2024 (Monday) - Galaxy and beyond & Theoretical Astrophysics				
9:30 AM - 10:30 AM	Astroseismology	Santosh Joshi	Stellar Variability	Mamta
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	Remote sensing and ML demo	Prajjwal Rawat	Satellite retrievals and processing with machine learning	Subhajit Debnath
12:00 PM - 1:00 PM	Theoretical Astrophysics	Indranil Chattopadhyay	Theoretical Astrophysics: Newton to Einstein	Bablu Mandal
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Theoretical Astrophysics	Indranil Chattopadhyay	Compact Objects	Khushboo Sharma
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM - 4:30 PM	Galaxy and beyond	Suvendu Rakshit	An Introduction to Cosmology	Khushboo Sharma
4:30 PM - 6:30 PM	Data Analysis	Project Guides		-----
Cultural Evening (6:30 PM onwards in the Auditorium)				
April 29, 2024 (Tuesday) - Detection Methods & Observing Technique				
9:30 AM - 10:30 AM	Exoplanets	Yogesh C Joshi	Exoplanetary Detection and Recent Advancements	Arjun Dawn
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-12:00 PM	High Energy Astrophysics	Jagdish C Joshi	Cosmic Rays	Anshika Gupta
12:00 PM - 1:00 PM	Transient detection	Kuntal Misra	The 4m International Liquid Mirror Telescope (ILMT)	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Observing Techniques	Jeewan C Pandey	Basics of X-ray Astronomy	Bablu Mandal
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM - 4:30 PM	Demo Session	Kumar Pranshu, Sarvesh K Yadav	Machine Learning in Astronomy	Rohan Bose
4:30 PM - 6:30 PM	Data Analysis	Project Guides		-----

ATSOAA 2025 - Programme Schedule

Time	Session	Speaker	Title	Session Chair
April 30 , 2024 (Wednesday) - Atmospheric Science & Modelling				
9:30 AM - 10:15 AM	Atmospheric Modelling	Rajesh Kumar	Fundamentals of air quality modeling	Mayank Kr. Chauhan
10:15 AM – 11:15 AM	Atmospheric Science	Narendra Singh	Micrometeorology and lidars for atmospheric observations	
Tea/Coffee Break (11:15 AM - 11:30 PM)				
11:30 AM – 01:00 PM	Visit	Subhajit, Mayank Chauhan, Vikas Rawat	Balloon launch & ST RADAR visit	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Demo	Mayank Chauhan and Subhajit Debnath	Micro meteorology and Atmospheric tides/ gravity waves with radiosonde and Aries ST Radar	Vikrant Tomar
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM - 6:30 PM	Data Analysis	Project Guides		-----
May 01, 2024 (Thursday) - Facilities @ARIES & Public Outreach				
9:30 AM - 10:15 AM	Atmospheric Modelling Demo	Rajesh Kumar	Air quality modelling	Vikrant Tomar
10:15 AM - 11:00 AM	Optical Telescopes	T. S. Kumar	Active vs Adaptive Optics in Telescopes	Arjun Dawn
Tea/Coffee Break (11:00 AM - 11:30 AM)				
11:30 AM-12:15 PM	Optical Telescopes	Tarun Bangia	Overview of 3.6-m DOT	Sarvesh K Yadav
12:15 PM - 1:00 PM	Public Outreach	Virendra Yadav	Taking Astronomy to General Public	
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Demo Session	Samresh Bhattacharjee	ARIES ST Radar science and data processing	Mayank Kr Chauhan
Tea/Coffee Break (3:00 PM - 3:30 PM)				
3:30 PM - 6:30 PM	Data Analysis	Project Guides		-----

ATSOAA 2025 - Programme Schedule				
Time	Session	Speaker	Title	Session Chair
May 02, 2024 (Friday) - Final Day				
9:30 AM - 10:30 AM	Project Presentation	Project Groups		Pritam Das, Rishi C
Tea/Coffee Break (10:30 AM - 11:00 AM)				
11:00 AM-1:00 PM	Project Presentation	Project Groups		Bablu Mandal, Sarvesh K Yadav
Lunch Break (1:00 PM - 2:00 PM)				
2:00 PM - 3:00 PM	Interaction	Interaction with RSs and PDFs/Concluding Remarks/Feedback		Rohan Bose
END				