

Himalayan School for Training in Astronomy Research (HiSTAR)

Dates - 8-12 June, 2026

Venue - Applied Science Cluster, School of Advanced Engineering, UPES - Bidholi Campus & Dolphin (PG) Institute of Biomedical & Natural Sciences (DIBNS), Dehradun

Session	Speaker	Title of the talks
Day 1: 8 June 2026 - Monday (Venue: UPES Bidholi Campus)		
Registration (09:00 - 09:30 hrs)		
Day 1, Session I (MAC/1006) - Inaugural Ceremony & Opening Addresses		
09:30 - 09:35 hrs	UPES & DIBNS	Opening Remarks
09:35 - 09:45 hrs	Hon'ble Vice Chancellor, UPES	Welcome Address
09:45 - 09:50 hrs	IUCAA Coordinator	Address by Dr. Anupam Bhardwaj
09:50 - 09:55 hrs	Local Coordinators	Address by Dr. Nitesh Kumar & Dr. Asheesh Raturi
09:55 - 10:00 hrs	UPES Representatives	Introduction of Dignitaries and Guests
10:00 - 11:00 hrs	Anupam Bhardwaj	Fundamentals of Astronomy: Our Stellar Universe
High Tea (11:00 - 11:30 hrs)		
Day 1, Session II (Chair: Prof. Hemwati Nandan) [Venue: Applied Science Cluster]		
11:30 - 12:30 hrs	Arun Kumar Awasthi	Introduction to the Sun and Space Weather
12:30 - 13:30 hrs	Anupam Bhardwaj	Star Formation and Evolution
Lunch Break (13:30 - 14:30 hrs) [MDC Food Court]		
Day 1, Session III (Hands-on Lab) (Chair: Prof.) [Venue: Applied Science Cluster]		
14:30 - 16:00 hrs	Kumar Pranshu, Rahul Sharma, Prince Sharma	Hands-on Session I: Introduction to Python and Basic Astronomical Data Handling
Tea Break (16:00 - 16:30 hrs)		
16:30 - 17:30 hrs	Kumar Pranshu, Rahul Sharma, Prince Sharma	Hands-on Session II: Basic Astronomical Data Handling (CCD Image Processing)
Evening Session: Sky-gazing Orientation (18:30 hrs onwards) [UPES Amphitheatre] (Weather Permitting)		

Day 2: 9 June 2026 - Tuesday (Venue: UPES Bidholi Campus)		
Day 2, Session I (Chair: Prof. Yogesh Joshi) [Venue: Applied Science Cluster]		
09:30 - 10:30 hrs	Rahul Sharma	Exploring Compact Objects in Astrophysics
10:30 - 11:30 hrs	Smriti Mahajan	Introduction to Galaxies
Tea Break (11:30 - 12:00 hrs)		
Day 2, Session II (Chair: Prof. Ranjeet Brajpuriya) [Venue: Applied Science Cluster]		
12:00 - 12:45 hrs	Main Pal	High-Energy Study of Black Holes & AGN
12:45 - 13:30 hrs	Kumar Pranshu	Transients in time-domain astronomy
Lunch Break (13:30 - 14:30 hrs) [MDC Food Court]		
Day 2, Session III (Hands-on Lab) (Chair: Prof. Santosh Dubey) [Venue: Applied Science Cluster]		
14:30 - 15:30 hrs	Main Pal	Hands-on project on AGN
15:30 - 16:00 hrs	Kumar Pranshu	Hands-on project on Transients/Variables
Tea Break (16:00 - 16:30 hrs) [Quadrangle]		
16:30 - 17:30 hrs	Kumar Pranshu	Hands-on project on Transients/Variables
Day 3: 10 June 2026 - Wednesday (Venue: UPES Bidholi Campus)		
Day 3, Session I (Chair: Prof. Ranjeet Brajpuriya) [Venue: Applied Science Cluster]		
09:30 - 10:30 hrs	Prof. Bhuwan C. Bhatt	TBD
10:30 - 11:30 hrs	Kaushal Sharma	Machine Learning in Astronomy
Tea Break (11:30 - 12:00 hrs)		
Day 3, Session II (Chair: Prof. Prashant Rawat) [Venue: Applied Science Cluster]		
12:00 - 12:45 hrs	Susmita Das	Variable Stars and Stellar Pulsations
12:45 - 13:30 hrs	Nikhil Rajput	From Stars to Signals: A Hands-on Introduction to Machine Learning with Astronomical Data
Lunch Break (13:30 - 14:30 hrs) [MDC Food Court]		
Day 3, Session III (Hands-on Lab) (Chair: Prof. Santosh Dubey) [Venue: Applied Science Cluster]		
14:30 - 16:00 hrs	K. Sharma, N Kumar, N Rajput	Hands-on Session on AI/ML
Tea Break (16:00 - 16:30 hrs) [Quadrangle]		

16:30 - 17:30 hrs	K. Sharma, N Kumar, N Rajput	Hands-on Session on AI/ML
Evening Session: Telescope Observation & Public Astronomy Outreach (18:30 hrs onwards) [DIBNS Campus] (Weather Permitting)		
Day 4: 11 June 2026 - Thursday (Venue: Dolphin PG Institute - DIBNS Campus)		
Day 4, Session I (Chair: Prof.) [Venue: DIBNS Seminar Hall]		
09:30 - 10:30 hrs	Vaidehi Paliya	Observational Aspects of Active Galactic Nuclei - I
10:30 - 11:30 hrs	Arun Kumar Awasthi	Solar Flares, CMEs, and Solar Energetic Particles
Tea Break (11:30 - 12:00 hrs)		
Day 4, Session II (Chair: Dr. Aasheesh Raturi) [Venue: DIBNS Seminar Hall]		
12:00 - 13:00 hrs	Rahul Sharma	X-ray Astronomy
Lunch Break (13:00 - 14:00 hrs)		
Day 4, Session III (Chair: Prof.) [Venue: DIBNS Lab]		
14:00 - 16:00 hrs	Arun Kumar Awasthi	Hands-on Session on Solar Flare Data and Image Subtraction Pipelines
Tea Break (16:00 - 16:30 hrs)		
16:30 - 17:30 hrs	Arun Kumar Awasthi	Hands-on Session on Solar Flare Data and Image Subtraction Pipelines
Day 5: 12 June 2026 - Friday (Venue: Dolphin PG Institute - DIBNS Campus)		
Day 5, Session I [Venue: DIBNS Seminar Hall]		
09:30 - 10:15 hrs	Vaidehi Paliya	Observational Aspects of Active Galactic Nuclei - II, Multi-wavelength Study of Blazars & AGN
10:15 - 11:00 hrs	Ramesh Bhadri	Setting up your own observatory and helping science
Tea Break (11:00 - 11:30 hrs)		
Day 5, Session II [Venue: DIBNS Seminar Hall]		
11:30 - 12:30 hrs	Vaidehi Paliya	Career Prospects in Astronomy
12:30 - 13:00 hrs	Coordinators & Dignitaries	Valedictory Ceremony, Participant Feedback, and Certificate Distribution
Farewell Lunch (13:00 hrs onwards)		

Coordinator(s) : **Dr. Nitesh Kumar (UPES), Dr. Asheesh Raturi (DIBNS), Prof. Anupam Bhardwaj (IUCAA)**

Resource persons:

- **Dr. Anupam Bhardwaj** : Scientist, IUCAA Pune
- **Prof. Hemwati Nandan** : Professor, HNBGU Srinagar Garhwal
- **Prof. Bhuwan Bhatt** : Professor, Indian Institute of Astrophysics, Bangalore
- **Dr. Kaushal Sharma** : Scientific Officer, Forensic Science Laboratory, Uttar Pradesh
- **Dr. Susmita Das** : Post Doc Fellow, IUCAA Pune
- **Prof. Vaidehi Paliya** : Scientist, IUCAA Pune
- **Dr. Arun Kumar Awasthi** : Asst. Professor, Delhi University, Delhi
- **Dr. Rahul Sharma** : Scientist, IUCAA Pune
- **Dr. Main Pal** : Asst. Professor, Sri Venkateswara College, University of Delhi, Delhi
- **Dr. Nikhil Rajput** : Associate Professor, Ramanujan College, University of Delhi, Delhi
- **Dr. Smriti Mahajan** : Director Educational Partnerships, Starscapes
- **Mr. Kumar Pranshu** : Research Scholar, ARIES Nainital
- **Mr. Ramesh Bhadri** : Amateur Astronomer & Astrophotographer, Tehri Skies, Pahadi Astronomer
- **Dr. Asheesh Raturi** : Asst. Professor, DIBNS Dehradun
- **Dr. Nitesh Kumar** : Asst. Professor, UPES Dehradun

Local Organizing Committee:

- **Dr. Nitesh Kumar** : Asst. Professor, UPES Dehradun
- **Dr. Asheesh Raturi** : Asst. Professor, DIBNS Dehradun
- **Prof. Hum Chand** : Professor, Central University of Himachal Pradesh, Shimla
- **Dr. Asheesh Raturi** : Asst. Professor, DIBNS Dehradun
- **Dr. Prince Sharma** : Asst. Professor, UPES Dehradun
- **Dr. Arka Chatterjee** : Asst. Professor, UPES Dehradun
- **Dr. Balendra P. Singh** : Asst. Professor, UPES Dehradun
- **Dr. Prashant Rawat** : Sr. Associate Professor, UPES Dehradun
- **Prof. Ranjeet Brajpuriya** : Cluster Head, Applied Science Cluster, UPES
- **Prof. Rajeev Gupta** : Program Lead, Department of Physics, Applied Science Cluster, UPES
- **Prof. Santosh Dubey** : Professor, Applied Science Cluster, UPES
- **Prof. Gagan Anand** : Professor, Applied Science Cluster, UPES
- **Dr. Suvankar Roy Chowdhury** : Asst. Professor, Applied Science Cluster, UPES
- **Dr. Jyoti Babbar** : Asst. Professor, Applied Science Cluster, UPES
