

St. Xavier's College (Autonomous), Kolkata





HANDS ON ASTRONOMY AT FELO



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St. Xavier's College (Autonomous), Kolkata





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HANDS ON ASTRONOMY AT FELO

INAUGURAL ADDRESS:

REV. DR. DOMINIC SAVIO, SJ PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS), KOLKATA



A two-day summer workshop on Astronomy and Astrophysics for students of classes 9 to 12

Registration Fee: ₹400 (per head)



8TH - 9TH AUGUST 2025



ROOM 15 (D'SOUZA HALL)



10:00 A.M. TO 4:00 P.M.



ABOUT US



The Xaverian Astronomical Society (XAS) is the only astronomy-focused club at St. Xavier's College (Autonomous), Kolkata, dedicated to cultivating interest in Astronomy and Astrophysics. Active year-round, XAS hosts expert talks, stargazing nights, research discussions, and a variety of engaging student activities—from skywatching sessions to collaborative projects and creative competitions.

Its flagship event, Hands-On Astronomy at the Father Eugene Lafont Observatory (FELO), is a two-day summer school. This high-impact programme offers students an immersive introduction to the universe through engaging theoretical sessions and practical activities.

Aimed at students of Classes 9 to 12, this event strips away the ordinary and puts the real sky in your hands — with guided sessions, live telescope work, and direct exposure to astronomical tools at the legendary Father Eugene Lafont Observatory.

Led by,

Rev. Fr. Dr. Dominic Savio, SJ – Principal, St. Xavier's College (Autonomous), Kolkata & President, XAS, SXC Dr. Suparna Roychowdhury – Deputy President, XAS, SXC Dr. Ashadul Halder – Deputy Vice President, XAS, SXC and powered by the XAS Core Student Committee.

This is where curiosity turns kinetic.
This is where science stops being a subject and becomes an experience.



UNVEILING SUMMER SCHOOL 2025 ~ DEPUTY PRESIDENT'S ADDRESS

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As the Deputy President of the Xaverian Astronomical Society (XAS), it gives me immense pleasure to present this year's edition of Hands-On Astronomy at the Father Eugene Lafont Observatory (FELO)—a flagship Summer School for high school students, organised by XAS, the only astronomy-focused club at St. Xavier's College (Autonomous), Kolkata. With this summer school, we extend our spirit beyond our campus, inviting the next generation of astronomers to begin their journey among the stars. This immersive two-day programme is designed to ignite curiosity, encourage scientific thinking, and introduce young minds to the latest frontiers in Astronomy and Astrophysics.

This year, the summer school will be held as a two-day workshop on the 8th and 9th of August, 2025. Day one features a Solar Observation and Analysis session at the prestigious Father Eugene Lafont Observatory, St. Xavier's College (Autonomous), Kolkata.

We are honoured to host **Chitradeep Saha** (Ph.D. Research Scholar (CSIR SRF),Center of Excellence in Space Sciences India (CESSI),Indian Institute of Science Education and Research, Kolkata) and **Dr. Supratik Pal** (Professor-in-Charge, Physics & Earth Sciences Division, Professor, Physics & Applied Mathematics Unit Indian Statistical Institute - Indian Statistical Institute, Kolkata) as guest speakers on the first and second days, respectively. Additionally, interactive student-led sessions are planned on both days to give high schoolers a glimpse into real-world astronomical work.

We sincerely hope that this event will prove to be an enriching and informative experience for all the students, equipping them with useful skills and encouraging them towards learning more and carrying forward the spirit of exploration of the cosmos.

Dr. Suparna Roychowdhury

Deputy President

XAS, SXC



DAL CAPO ~ ASSISTANT DIRECTOR OF FELO



We are delighted to inform you that the Xaverian Astronomical Society has been preparing to launch yet another Summer School this year for the young pool of science enthusiasts in 9th to 12th grades - Hands-on Astronomy at FELO - a golden opportunity for these young space fanatics to engage in a two-day Astronomy and Astrophysics workshop where they will take a dive into the depths of cosmic wonders and fascinating stellar adventures.

The workshop will include productive hands-on sessions for the students and a visit to the esteemed Father Eugene Lafont Observatory, India's largest institutional observatory.

The observatory, established in 1866 by Father Eugene Lafont provides extensive facilities for stellar, solar and lunar observations, thus providing a fascinating and enriching experience to all the passionate galactic travellers.

Dr. Shibaji Banerjee Assistant Director of FELO SXC



SPEAKER SESSIONS



FOR DAY 1

Chitradeep Saha

Ph.D. Research Scholar (CSIR SRF)
Center of Excellence in Space Sciences India (CESSI)
Indian Institute of Science Education and Research Kolkata



FOR DAY 2

Prof. Supratik Pal

Professor-in-Charge, Physics & Earth Sciences Division Professor, Physics & Applied Mathematics Unit Indian Statistical Institute



Day one: Unveiling the Stars: A Journey Through Stellar Astrophysics

Every star tells a story, and it begins with our own. In this session led by members of the society, students trace the glow of the Sun to uncover how light, colour, and shadows help us read the language of the cosmos.

From measuring starlight to watching sunspots dance, they'll explore how we make sense of distant suns using simple tools and timeless questions. With hands-on activities and skyward curiosity, this is a gentle dive into the rhythms of the universe; written in light and guided by wonder.

Day two: Cosmic Clocks & Gravity: A Journey Through Cosmology

What if the universe had a heartbeat? What if it was all just a rhythm set in motion by gravity, echoed by stars, and measured by time itself? In this session, society members would like to take you on a journey to feel that heartbeat, beginning with Newton's laws, and coming full circle to the beautiful thrum of galaxies in motion.

You will marvel at why the night sky is dark, as you observe the universe silently expanding. Along the way, you will explore the colors of distant galaxies and the flow of time, discovering that even when everything seems still, the universe is always moving.





Observation Session: Solar Observation at the Father Eugene Lafont Observatory

Step close to Helios, the shining god of the Sun, and behold his radiant light through the lenses of our very own telescopes at the Father Eugene Lafont Observatory. Guided by passionate student mentors, you will witness the Sun's glowing surface and the shadowy whispers of sunspots, mysterious marks that tell tales of a star alive with energy. This hands-on journey brings the classroom to the sky, inviting you to safely explore the living star that has inspired wonder and life throughout the ages.





EVENT SCHEDULE



SCHEDULE FOR DAY 1 DATE: 8TH AUGUST, 2025

TIME	EVENT	VENUES
10:30 - 10:40	Inauguration (Dignitaries speech)	Room 15
10:40 - 10:50	Break (tea, technical setup)	Room 15
10:50 - 11:45	Speaker Session 1	Room 15
11.55 - 13:10	Solar Observation Session at FELO	Solar Observation Session at FELO
13:15 - 13:45	Lunch	Lunch
14:00 - 16:00	Hands on student session for day 1 (Stellar Astrophysics)	Room 15





SCHEDULE FOR DAY 2 DATE: 9TH AUGUST, 2025

TIME	EVENT	VENUES
10:10 - 10:20	Vote of Thanks	Room 15
10:20 - 11:20	Hands on student session from day 1 continued	Room 15
11:20 - 11.30	Technical Setup	Room 15
11:30 - 12:30	Speaker session 2	Room 15
12:30 - 12:35	Break	Room 15
12:35 - 13:15	Hands on student session for day 2 (Cosmology)	Room 15 / RR Lab
13:15 - 14:00	Lunch	Canteen (for students)
14:15 - 15:30	Hands on Cosmology session continued	Room 15/ RR lab
15:30 - 15:50	Valedictory	Room 15