

Report on Telescope-Making Workshop and Sunspot Observation

A telescope-making workshop and sunspot observation event was successfully organized by the Department of Physics, St Aloysius College, in association with Breakthrough Science Society on 17 January 2025 at Mini Auditorium. The event aimed to educate participants, especially school students of classes 8 and 9, about the principles of telescope construction, astronomical observation techniques, and solar phenomena, specifically sunspots.

Dr. Lakshmi Vijayan, Head of the Department of Physics, presided over the inaugural function. The workshop was inaugurated by Principal Prof. Indulal G. and Prof. P N Thankachan, who introduced the workshop to the participants. The participants include 51 students from 7 neighbouring schools and UG and PG students of physics and other departments. The workshop commenced with an introduction to different types of telescopes, their working principles, and essential components. Participants were guided step by step in assembling their telescopes using lenses and PVC tubes. Experts from the Breakthrough Science Society provided hands-on demonstrations and assistance throughout the session. The attendees learned about focal length, magnification, and alignment techniques crucial for compelling astronomical viewing. This session offered a rare opportunity for students to build their telescope.



Sunspot Observation: Following the telescope-making session, participants engaged in live sunspot observation using telescopes equipped with solar filters. Safety precautions were emphasized to prevent direct eye exposure to the Sun. Resource persons from the Breakthrough Science Society explained the significance of sunspots, their impact on solar activity, and their role in understanding the Sun's magnetic field. Real-time observations allowed participants to

identify and document sunspot patterns and discuss their findings. The sunspot observation is open to the whole college, and students and faculty members actively participated in this event.



Participant Engagement and Feedback: The event witnessed enthusiastic participation from students and science enthusiasts. A Feedback session from attendees indicated high

satisfaction, with many expressing interests in further workshops on astronomy. The workshop enabled students to develop curiosity in physics and foster their scientific temperament.

Conclusion: The telescope-making workshop and sunspot observation event successfully combined hands-on learning with real-time astronomical exploration. The event significantly promoted interest in astronomy by fostering curiosity and practical knowledge. The workshop taught the technical aspects of telescope making and provided insights into the Breakthrough Science Society activities.





Organized By: Department of Physics, St Aloysius College, Edathua.

Date: 17 January 2025

Venue: Mini Auditorium, St Aloysius College