- Rayat Shikshan Sanstha's

Annasaheb Awate Arts, Commerce & Hutatma Babu Genu Science College, Manchar

Department of Physics

Astrophysics Summer Camp for School Students Report: May,2025

Date: 13th to 16th May,2025
Venue: Annasaheb Awate Arts, Commerce & Hutatma Babu Genu Science College, Manchar
Organized by: IUCAA in association with the college

Introduction:

A 4-day Summer School on Astrophysics was organized from 13th May,2025 to 16thMay, 2025 to ignite and kindle the curiosity and interest in physics among the selected school students. The program aimed to provide hands-on experience, conceptual clarity, and interactive learning through experiments, lectures, and activities. The initiative targeted students from grades 10th passed and witnessed enthusiastic participation from various schools in Ambegaon tehsil.

Objectives:

- To foster interest in physics through experiential learning.
- To provide a platform for students to explore physics beyond the classroom.
- To encourage scientific thinking, inquiry, and teamwork.
- To offer exposure to advanced topics in a simplified, engaging manner.

Program Overview:

The summer school spanned four days, with each day dedicated to a specific theme in physics. The sessions included interactive lectures, practical demonstrations, lab activities, quizzes, and group discussions.

Day 1: Simple Experiments

- Hands-on experiments with pendulums and inclined planes
- Workshop: Use of Vernier Calliper
- Fun Activity: Physics quiz and

Day 2: Astrolabe

- Lab work: Measuring height of building
- Demonstrations: Heat engines and real-life applications
- Group Discussion: Renewable vs non-renewable energy

Day 3: Physics of Electromagnetic Spectrum

- Basics of Electromagnetic Spectrum
- Helium, Hydrogen spectrum
- Workshop: Constructing a pinhole camera
- Experiments with prisms and diffraction
- Activity: Exploring the science of rainbows

Day 4: Visit to IGO

- Understanding of working of IGO

- Closing Ceremony: Certificate distribution and feedback session

Outcomes:

- Over 23 students participated and actively engaged in all activities.
- Students demonstrated improved conceptual understanding and curiosity in physics.
- The feedback collected indicated a high level of satisfaction and enjoyment.
- Several students expressed interest in pursuing further studies in physics.

Conclusion:

The 4-day Summer School on Physics successfully fulfilled its goal of making physics engaging and accessible to school students. Through a blend of theory and practicals, the event created a stimulating learning environment and left a lasting impact on all participants.

Geo-tagged Photos:









Science Activities through the experimental demonstration









Prin. Dr. N.S. Gaikwad guidance on Electromagnetic Spectrum





Group photograph with the participants, Prin. Dr. N.S. Gaikwad and IUCAA staff