

Astronomers team up to share info, facilities

Community To Create Ground Network For Astrosat

Swati Shinde Gole | TNN

Pune: Amateurs from across the nation, who attended a three-day workshop conducted by the Inter-University Centre for Astronomy and Astrophysics (IUCAA) in the city, formed perhaps the country's first network. The move aims to create a ground network for astronomy satellite (Astrosat), and bring together universities and their facilities.

Scientific talks by professionals and experts were organised during the workshop which concluded on Sunday. As many as 15 colleges and universities, including the Delhi University, University of Calcutta, University of Kashmir and Kochi University, and five amateur astronomers participated in the programme. The participants were given hands on experience in data processing as well as the telescope facility of IUCAA.

"Many universities have courses in astrophysics and some universities have also been able to procure small telescopes ranging from 10 inch to 16 inch apertures. But the challenge lies in making productive use of the equipment. The newly-formed community will address these problems and initiate frequent interactions between universities and their facilities," Samir Dhurde, scientific staff, IUCAA, said.

The formation of this network will also help in drawing a census of facilities possessed by the colleges, universities and amateur astronomers. "Many institutions have procured good telescopes in the last few years, but they are not trained to use it. The network will impart this training with the help

ASTROSAT LAUNCH LIKELY NEXT YEAR

India's first dedicated astronomy satellite is in the final stages of completion and scientists have said it will likely be launched next year. Dipankar Bhattacharya, involved in the design and software of the astrosat, said, "Astrosat will certainly be launched by next year. The date will be fixed by the Indian Space Research Organisation (ISRO). Four of the five instruments being put together for the satellite are in the final stages and will be ready by May, while the fifth and the biggest instrument underwent a final approval in January. All these instruments will be delivered by the end of this year."

Astrosat will be India's first observatory wherein x-ray observations can be taken. So far, Indian scientists have been working at observatories outside the country, mainly the Chandra X-Ray observatory in the US.



Participants getting hands-on experience at the IUCAA facility on Friday

Transient objects

► One of the main goals of forming the amateur astronomers' community is to create a strong ground network for finding transient objects in the sky

► The community will become an important network to take ground based readings to spot these transient objects

► The Astrosat will have a sky monitor that can study half the sky

► If a transient object passes through the other half of the sky, the ground network can inform the Astrosat to record the object for further study

“Transient objects are those that can be typically observed for not more than a few days. There is no transient observation community in India as yet. Professional observatories are powerful, but it is not always aware of transients which may be in the other parts of the sky

Dipankar Bhattacharya | PART OF ASTROSAT PROJECT

of experts, which in turn will increase the standard of research, start new experiments and enable students to grow. Universities and students will benefit in a big way," said Dhurde.

Seven task groups have been formed through this network — two groups will look at hardware-

related queries, four groups will focus on purely scientific goals and one group will look after teaching and project co-ordination. The group co-ordinators will meet every month, decide a task for the next three months, take feedback and submit a report to the main co-ordinator.