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WATCH
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Amateur astronomy, a fascinating hobby

Amateur astronomy is a hobby whose participants enjoy watching the night sky (and the day sky too, for sunspots, eclipses, etc.), and the plethora of objects found in it, mainly with portable telescopes and binoculars. Even though scientific research is not their main goal, many amateur astronomers make a contribution to astronomy by monitoring variable stars, tracking asteroids and discovering transient objects, such as comets.

The typical amateur astronomer is one who does not depend on the field of astronomy as a primary source of income or support, and does not have a professional degree or advanced academic training in the subject. Many amateurs are beginners, while others have a high degree of experience in astronomy and often assist and work alongside professional astronomers.

Amateur astronomy is usually associated with viewing the night sky when most celestial objects and events are visible, but sometimes amateur astronomers also operate during the day for events such as sunspots and solar eclipses. Amateur astronomers often look at the sky using nothing more than their eyes, but common tools for amateur astronomy include portable telescopes and binoculars.

People have studied the sky throughout history in an amateur framework, without any formal method of funding. It is only within about the past century, however, that amateur astronomy has become an activity clearly distinguished from professional astronomy, and other related activities.

Collectively, amateur astronomers observe a variety of celestial objects and phenomena. Common targets of amateur astronomers include the Moon, planets, stars, comets, meteor showers, and a variety of deep sky objects such as star clusters, galaxies, and nebulae. Many amateurs like to specialise in observing particular objects, types of objects, or types of events which interest them. One branch of amateur astronomy, amateur astrophotography, involves the taking of photos of the night sky. Astrophotography has become more popular for amateurs in recent times, as relatively sophisticated equipment, such as high quality CCD cameras, has become more affordable.



GETTING STARTED: Amateur astronomers can contribute to man's existing knowledge of astronomy

Most amateurs work at visible wavelengths, but a small minority experiment with wavelengths outside the visible spectrum. An early pioneer of radio astronomy was Grote Reber, an amateur astronomer who constructed the first purpose built radio telescope in the late 1930's to follow up on the discovery of radio wavelength emissions from space by Karl Jansky. Non-visual amateur astronomy includes the use of infrared filters on conventional telescopes, and also the use of radio telescopes. Some amateur astronomers use home-made radio telescopes, while others use radio telescopes that were originally built for astronomy research but have since been made available for use by amateurs

There is a large number of amateur astronomical societies / organisations around the world that serve as a meeting point for those interested in amateur astronomy. In Pune we have such four organisations - the Akashmitra, the Khagol Vishv, the SWAP and the Jyotrividya Parisanstha. Of these, the Jyotirvidya Parisanstha is the oldest amateur astronomers association in India. On August 22, 1944, some eminent citizens of Pune formed the Jyotirvidya Parisanstha (now know as JVP), primarily to spread knowledge of astronomy in the public and also to make their own contribution as far as possible. It was the first association of its kind and remained so far for a few decades. Right from conception, JVP has been actively working on the propagation of astronomy in purely scientific temperament. JVP conducts courses on the basics of astronomy as well as advanced astronomy like mathematics in astronomy, astro-photography and telescope-making workshops for amateurs.

Among the many well known amateur astronomers are Thomas Bopp and Alan Hale who discovered the comet Hale-Bopp; Robert Owen Evans who is a minister of the Uniting Church in Australia and holds the all-time record for visual discoveries of supernovae; Will Hay, the famous comedian and actor, who discovered a white spot on Saturn; and David H Levy who discovered the well known comet Shoemaker-Levy 9 and co-discovered 22 comets, the most for any individual. These are the idols of the world of amateur astronomers.

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– Jyotirvidya Parisanstha