Astronomy for Everyone

One of the wonderful things about astronomy is that anyone can participate. Whether you work for the Space Telescope Science Institute (http://www.stsci.edu/) or you just use your naked eye, everyone can participate and enjoy.

In 1609, Galileo started making astronomical observations with a telescope and published those observations. Those observations revolutionized astronomy. A similar telescope to what Galileo used can now be purchased for only $15. More modern, amateur, telescopes can be used, not only for the enjoyment of the amateur, but also to add to astronomical research. Such an observation was recently made in the discovery that Jupiter recently had been hit by a comet or asteroid.

On 19 July 2009, Anthony Wesley of Murrumbateman Australia observed “dark impact mark” using his 14.5” telescope. His observations were made with a special digital camera. Yes, even serious amateurs may use near professional instruments. Further observations were made by the recently upgraded Hubble Space Telescope and similar ground and space-borne instruments.

What’s Up?

How can someone participate if they do not have a telescope? Well, one way in which a budding amateur can participate is to simply observe the Moon. During the last two weeks, the Moon has been fairly visible at night. In fact, the past few nights, the Moon has been giving quite a show as it rises - though, it has been rising later and later.

The good news is that the Moon repeats this cycle every month. Check your calendars or newspapers for when the Moon will be visible again. Or ask a friendly local astronomer.

Enjoy the Show!

However, if you REALLY want to watch a show, check out the Perseid meteor shower this week. While not simply confined to a specific day, the Perseid meteor shower is at its peak the evening of the 11th to the morning of the 12th of August.

A “meteor” is sometimes referred to as a “shooting star”. However, they are not stars at all. Meteors are the glow of gasses in our atmosphere as a piece of debris passes through the atmosphere and heats up the gasses. The Perseid meteor shower is a result of the Earth passing through the debris of comet Swift-Tuttle. As that debris enters our atmosphere, it produces the glow that we see as a “shooting star”.

The “shooting stars” will be visible across the whole sky; however, their tails will appear to to radiating from within the constellation Perseus. The point that seems to be the source of the meteors is called the radiant.

Looking northeast around midnight on August 11th-12th. The red dot is the Perseid radiant. Although Perseid meteors can appear in any part of the sky, all of their tails will point back to the radiant. Image copyright: Spaceweather.com (http://science.nasa.gov/headlines/y2009/31jul_perseids2009.htm)

The shooting stars will be visible across the whole sky; however, their tails will appear to radiating from within the constellation Perseus. The point that seems to be the source of the meteors is called the radiant.

Usually, the best time to watch a meteor show is after midnight; however, because the Moon is rising after midnight, the best time for this show is from 9:00 pm to 11:00 pm. Lie down in a dark area and enjoy the show!!

Clear skies and happy observing.