## The Night Sky

## Perseid Meteor Shower Should Dazzle This Year

The warm nights of August present comfortable conditions to observe the night sky. Unfortunately the heat of the summer often causes the atmosphere to be hazy. Every August, the earth plows through the meteoroid stream deposited by Comet Swift-Tuttle around August 12<sup>th</sup> giving rise to the Perseid meteor shower. This year offers one of the best opportunities to observe the Perseids over the past few years since the crescent moon rises after midnight on the night of the shower's peak, August 11-12. The best time to observe these meteors is anytime after midnight. These meteors, or shooting stars, can appear in any part of the sky, though most should be seen towards the northeast direction. Another interesting characteristic of the Perseids is that the stream is relatively thick which means that these meteors can be spotted a few days before and after the peak.

Over the past half year, Saturn has been near the bright star Spica in the constellation of Virgo. Through the spring and summer, Mars has been moving on the sky from Leo into Virgo approaching the Saturn-Spica pair. On the nights of August 13 and 14 watch Mars pass right between Saturn and Spica. On these nights these three celestial objects form a nearly straight line in the low western sky one hour after sunset.

While Saturn and Mars put on a show at dusk, Jupiter and Venus, the two brightest planets seen from the earth, are dazzling in early morning sky throughout August. Both of these planets are close to the Hyades star cluster and the bright red giant star Aldebaran in the constellation of Taurus during this month. From August 11<sup>th</sup> through the 15<sup>th</sup>, the moon joins these two planets in the sky. Then from August 14<sup>th</sup> through the 22<sup>nd</sup>, planet Mercury appears in the low eastern sky about one half hour prior to sunrise.

August 2012 will display two full moons, one on August 1<sup>st</sup> and the other on August 31<sup>st</sup>. When a month has two full moons, the second full moon is often called a "blue moon." This doesn't mean that the moon will appear blue in the sky; the name actually arises from 16<sup>th</sup> century folklore.

The ETSU Powell Observatory open houses are on hiatus for the summer. They will resume in the fall on September 22<sup>nd</sup> from 8 to 10 p.m. assuming the sky is clear.

This month's Night Sky was written by Dr. Donald G. Luttermoser, Chair of the Department of Physics and Astronomy. He can be reached at <u>lutter@mail.etsu.edu</u>. Astronomy-related information for the public, including a link to the ETSU astronomy open houses, can be found at <u>http://www.etsu.edu/cas/physics/outreach/astronomy.aspx</u>.