## The Night Sky

## **Mars Comes On Strong**

It has been two years since planet Mars has dazzled the evening observer. The red planet becomes dramatically bright during the month of March and quickly starts to rival Jupiter in brightness in the evening sky. Mars is just to the northeast of the bright star Spica in the constellation of Virgo and rises about 3.5 hours after sunset in the beginning of March. By the end of the month, it rises in the east during the evening twilight. Compare Mars red color to that of the red supergiant star Antares which rises around midnight in the southeast sky. The name Antares actually means "the rival of Mars." The nights of March 17<sup>th</sup> and 18<sup>th</sup> will see a waning gibbous moon slowly move eastward just to the south of Mars and Spica making for a spectacular sight.

Bright Jupiter is nearly directly overhead at nightfall just to the south of the bright stars Castor and Pollux in Gemini. Jupiter and Mars will put on quite a show in the evening sky over the next two months. A waxing gibbous moon shines below Jupiter during the evening of March 9<sup>th</sup>.

The ringed planet Saturn rises just before midnight at the beginning of the month. A waning gibbous moon shines just to the east of Saturn on March 21<sup>st</sup>.

Brilliant Venus dominates the morning sky one hour before sunrise low in the southeast. Planet Mercury should be visible to the lower left of Venus in the bright twilight during the first two weeks of the month. There will be a close conjunction of Venus with a waning crescent moon on the morning of March 27<sup>th</sup>.

The moon is full on March 16<sup>th</sup>. The full moon in March has many names including the Full Worm Moon, the Full Crow Moon, the Full Crust Moon, the Full Sap Moon, and the Full Lenten Moon. On March 20<sup>th</sup>, the sun moves from the southern hemisphere on the sky to the northern hemisphere at 12:57 p.m. EDT. At this point, the sun is on the vernal equinox, directly over the Earth's equator and marks the beginning of the spring season in the northern hemisphere. Daylight Savings Time returns at 2:00 am on March 9<sup>th</sup> – make sure to move you clocks forward by one hour when you go to bed on the 8<sup>th</sup>.

The month of March offers the best time of year to catch the zodiacal light. This soft glow on the sky is caused by sunlight scattering off of dust in the inner solar system. It is best seen when the moon is absent or at an early crescent phase. As such, look for the zodiac light about 80 minutes after sunset from dark locations during the first week of March and the last half of the month. It should be visible for up to 3 hours after sunset.

Should the sky be clear the night of March 8<sup>th</sup>, there will be a free public astronomy open house at the ETSU Powell Observatory from 8 to 10 p.m. At these open houses, the public can view objects in the sky through telescopes and hear talks by faculty of the Physics and Astronomy Department. At this month's open house, I will be presenting the talk. Make sure you dress warmly for these open houses since evening temperatures can still be low in March. Note that the open houses are cancelled if the sky is

cloudy. Further information about these open houses can be found on the web at <a href="http://www.etsu.edu/cas/physics/observatory/default.aspx">http://www.etsu.edu/cas/physics/observatory/default.aspx</a>.

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