## The Night Sky

## **Jupiter at Opposition this Month**

Over the next four months, each month is going to feature one of our four brightest planets in the night sky. In May, Jupiter is at opposition followed by Saturn's opposition in June. Then in July, Mars has a very close opposition where it will get nearly as bright as it possibly can be as seen from earth. The last full summer month of August has Venus appearing at it greatest eastern elongation in the western sky after sunset. We are in for one exciting summer!

In the upcoming month of May, Venus dominates the evening twilight in the western sky and will remain visible for up to an hour and a half after sunset. Venus, the brightest of all of the planets in the sky, starts the month of May in the constellation of Taurus and races into Gemini by mid-month. On the evening of May 17<sup>th</sup>, a thin crescent moon will lie just to the left of Venus.

The "king of the planets," Jupiter, will be visible all night throughout May. Jupiter is at opposition, the point on the sky directly opposite the sun, in the evening of May 8<sup>th</sup>. On this date, Jupiter rises at sunset and sets the following morning at sunrise. Typically, planets shine at their brightest light when at opposition. As a result, throughout the month of May, two bright planets can be spotted in the early evening sky at the same time, Venus hanging low in the west, and Jupiter, hanging low in the east.

The ringed planet Saturn comes up a little after midnight at the beginning of the month and about 2 hours earlier by the end of May. Saturn's rings are near their maximum tilt which makes Saturn a beautiful view through even a small telescope. As mentioned above, Saturn will be at opposition in June.

Perhaps the most exciting planet this month is the red planet Mars. Mars continues its rapid increase in brightness as it races across the sky during the early morning. In late July, Mars will have its closest approach to the earth in 15 years. On May 1<sup>st</sup>, Mars the Red Planet bursts above the southeast horizon around 1:30 a.m. EDT. Mars starts the month slight brighter than the Arcturus, the 4<sup>th</sup> brightest star in the night sky. By May 31<sup>st</sup>, Mars rises a little after midnight, shining nearly as bright as Sirius, the brightest star in the night sky! Mars is now large enough in telescopes to spot surface features. As the summer progresses Mars increases in size and brightness surpassing Jupiter in brightness! This summer will be a real treat for Mars-watching.

The moon will be at full phase at 10:19 a.m. EDT on May 29<sup>th</sup>. Many Native Americans called the full moon of May as the Full Flower Moon, since flowers are abundant everywhere during this time of year.

The ETSU Powell Observatory open houses are on hiatus until September. Later this summer, the 2018-2019 schedule for our Astronomy 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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