

# The Night Sky

## Jupiter at Opposition in Early November

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Early in the month, namely the night of November 2<sup>nd</sup>, the King of the Planets, Jupiter, is at opposition. Opposition is defined as a point on the sky opposite to the Sun. On opposition nights, a planet rises at sunset and sets at sunrise, hence is visible all night. Jupiter is currently in the constellation of Aries the Ram. Jupiter is the second brightest “star-like” object in the night sky (Venus being the brightest) and is easy to spot. On the nights of November 24<sup>th</sup> and 25<sup>th</sup>, the nearly full Moon will appear on either side of Jupiter.

Ten days after Jupiter’s opposition on the 13<sup>th</sup>, the planet Uranus is at opposition as well. Although not visible to the naked-eye, Uranus is easy to spot at opposition with binoculars, where it appears just south of the star, Delta Arietis.

The ringed-planet, Saturn, is easily visible in the southern evening sky, since it is the brightest object in this region of the sky. Saturn is currently in the constellation of Aquarius

Prior to dawn on the morning of November 9<sup>th</sup>, brilliant Venus and the waning crescent Moon have a very close conjunction in the constellation of Virgo. Close conjunctions like this between our two brightest nighttime objects are always spectacular, so let’s hope for a clear sky on the morning!

Daylight-Savings Time ends at 2 a.m. on November 5<sup>th</sup>. Make sure you set your clocks to “fall-back” before you go to bed on Saturday, November 4<sup>th</sup>. November’s full Moon occurs at 4:16 a.m. EST on November 27<sup>th</sup>. The November full Moon is called the Full Beaver Moon, due to beavers actively preparing for winter and that native Americans were busy setting their beaver traps to get additional furs for the winter season.

The next ETSU Powell Observatory nighttime open houses will occur on November 18<sup>th</sup> from 8 until 10 p.m. EDT. At these open houses, the public can view objects in the sky through telescopes and hear talks by the faculty of the Physics and Astronomy Department. Note that the open houses are cancelled if the sky is cloudy. The 2023-2024 schedule for our Astronomy open houses can be found on the web at <https://www.etsu.edu/cas/physics/observatory/starparty.php>.

For those of you who would rather explore the night sky indoors, the November 2023 planetarium show will be on the 16<sup>th</sup> at 7:00 p.m. at the ETSU Planetarium in Hutcheson Hall. Please check the Planetarium web page at <https://www.etsu.edu/cas/physics/outreach/planetarium.php> for further information

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This month's Night Sky article was written by Dr. Donald G. Luttermoser, Chair of the Department of Physics and Astronomy at ETSU. He can be reached at [lutter@etsu.edu](mailto:lutter@etsu.edu). Any students wishing to pursue a career in Physics or Astronomy are encouraged to contact him at this email address. Astronomy-related information for the public, including a link to the ETSU Powell Observatory, can be found at <http://www.etsu.edu/cas/physics/> by selecting the Public Outreach pull down menu on the lower-left side of this web page.