

The Night Sky

Jupiter at Opposition this Month

Jupiter, the king of the planets, sits on the opposite side of the sky from the sun on April 7th. This means that Jupiter will be at its brightest, rising at sunset and setting at sunrise the next morning. Jupiter is currently in the constellation of Virgo, sitting about 6 degrees north of Virgo's brightest star, Spica, at the beginning of the month. Keep an eye on the separation between Jupiter and Spica throughout the month and you will notice Jupiter's motion on the sky as this giant planet slowly moves away from Spica. In addition, Jupiter makes a close passage to Theta Virginis on the night of April 5-6. This star will be positioned only a few times farther away from Jupiter as the large Galilean satellites. Since Theta Virginis is relatively faint, use binoculars to see this close passage.

On April 1st, planet Mercury will be at its highest altitude of the year at nightfall, setting some 1½ hours after sunset on the western horizon. Mercury will be bright enough to easily spot on this date in the darkening twilight. Unfortunately, this fine presentation doesn't last long as its brightness fades very quickly over the next week. By April 8th, Mercury sets only 45 minutes after the sun, and a few days later will be too faint to see in the bright twilight. As such, if you have never seen Mercury in the night sky, the first week of April is the best time to catch this planet. By the end of the month, Mercury will swing back to the morning sky rising before sunrise.

Mars continues to reside in the western sky during the evening, however the red planet significantly sinks in altitude above the western horizon. At the beginning of the month, Mars will be to the upper left of Mercury, though quite a bit fainter. During the last week of April, Mars makes a pretty passage between the Pleiades and Hyades star clusters in Taurus. A thin crescent moon will join Mars from April 27th through the 29th – it should make a very beautiful sight!

For you night-owls, the ringed planet Saturn rises an hour and a half after midnight as April begins, and by month's end, rises around 11:30 p.m. Saturn brightens a bit during this month as it approaches opposition on June 15th. Saturn currently resides in the western side of the constellation of Sagittarius.

The brilliant planet Venus returns to the morning sky in April, rising an hour before sunrise on April 1st. Venus climbs a little higher each day throughout the month. High-powered binoculars will easily show the crescent phase of Venus. As the month progresses, Venus will brighten until it reaches its maximum brightness on April 30th for this morning apparition.

The moon will be at full phase on April 11th at 2:08 a.m. EDT, shining to the lower left of Jupiter. Native Americans had a variety of names associated with the full moon of April, all associated with the spring season. These names include the Full Pink Moon, the Full Sprouting Grass Moon, the Egg Moon, and the Full Fish Moon.

The next free public astronomy open house at the ETSU Powell Observatory will occur on Saturday, April 1st 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. Note that the open houses are

cancelled if the sky is cloudy. Make sure you dress warmly since you will be standing outside to look through our telescopes. Further information about these open houses and directions to the observatory can be found on the web at <http://www.etsu.edu/cas/physics/observatory/default.aspx>.

This month's Night Sky was written by Dr. Donald G. Luttermoser, Chair of the Department of Physics and Astronomy at ETSU. He can be reached at lutter@mail.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 at the top of this web page.