The Night Sky

Good-Bye Venus, Hello Jupiter

The January 2014 evening sky will see Venus depart as it moves through inferior conjunction with the sun (on January 11th) and into the morning sky. At inferior conjunction, Venus is closest to the earth as these planets orbit the sun. During the first few days of January, look for brilliant Venus low in the west one-half hour after sunset. If you own binoculars, point them towards Venus to see if you can make out the crescent of Venus. By the end of January, Venus will be dazzling in the early morning sky one hour before sunrise. On the nights of January 28th and 29th, the thin crescent moon will be close to Venus in the early morning sky.

Meanwhile in the north-eastern evening sky, bright Jupiter rises at sunset on January 5th since this is the date of its opposition (that is, opposite side of the sky from the sun). As such, Jupiter will be shining at its maximum brightness for this month. On the night of January 14th, a nearly full moon shines just to the south of Jupiter – it should make a beautiful sight.

During the last half of the month, planet Mercury can be seen low in the south-western one-half hour after sunset. On January 31st, a slim crescent moon will be just to the right of Mercury which should help novice observers get their first sight of this innermost planet.

Mars will rise around midnight at the beginning of the month. During January, Mars brightens dramatically. On January 28th, Mars passes just north of Spica, the brightest star in the constellation of Virgo.

Unfortunately, Comet ISON fragmented prior to reaching perihelion, its closest point to the sun in its orbit. As such, it did not put on the spectacular show that many were anticipating in the early morning sky during December. Our home planet, earth, reaches perihelion on January 4th. Finally, the moon is full at 11:52 p.m. on January 15th. According to folklore, the January full moon is known as the Full Wolf Moon by Native Americans. Amid the cold and deep snows of midwinter, wolf packs often howled hungrily outside Indian villages, which gives this full moon its name.

The free public astronomy open houses at the ETSU Powell Observatory take a hiatus over the holiday break. They will resume on February 8, 2014. Further information about these open houses 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. He can be reached at lutter@mail.etsu.edu. Astronomy-related information for the public, including a link to the ETSU Powell Observatory, can be found at http://www.etsu.edu/cas/physics/outreach/astronomy.aspx.