

MAY 2011 ASTRONOMY
From the Trackman Planetarium at Joliet Junior College

Rumor has it that if the clouds we have been looking at for the last month were to disappear, we would have a sky full of stars, planets, the moon and the sun. Let's hope that May is a better month for viewing than April was.

On May 1st, the moon, Jupiter, Venus, Mars and Mercury will be in a tight group only 12 degrees wide. (Your closed fist at arm's length is about ten degrees.) The whole group will be within 28 degrees of the sun. A close grouping like this has almost no effect on the gravitational pull on the earth. The group of planets is too close to the sun to be seen before sunrise.

My mid-May, sunset isn't until 7:50 pm and so reasonable viewing won't begin until close to nine. The Gemini twins of Pollux and Castor will still be in the high in the western sky after dark. Above and to the east of the Gemini twins is the Big Dipper. The two stars (Dubhe and Merak) that mark the side of the dipper opposite the handle are the pointer stars and show the way to Polaris, the North Star. Below the Dipper is a bright red star (Regulus) that marks the chin of Leo the Lion. Leo's head looks like a backward question mark. To the west of Leo, toward Gemini, is the almost invisible constellation of Cancer. If you have binoculars, look in that area and you will find a close group of stars known as the Beehive Star Cluster. The Beehive Cluster was one of the first objects Galileo studied with his telescope. To the east of Leo and toward the bright red star, Arcturus (3rd brightest star in the sky) is the constellation of Coma Berenices. There is an open group of stars in Coma Berenices that is a great binocular target. Vega, the first of the Summer Triangle stars is in the northeastern sky in mid-May. The only visible planet in the evening sky is Saturn.

On May 5th, Earth will orbit through the remains from Halley's Comet and this will result in a minor meteor shower - the Eta Aquarids. The best time to look would be after midnight in the eastern sky. There will be no moon to interfere with viewing and you can expect to see about 20 meteors each hour if you are in dark skies.

The sun begins May in the constellation of Aries. On May 15th the sun moves into Taurus where it will spend the rest of the month. The full moon is on May 17th and was the May full moon was known by the Native Americans as the Full Flower Moon.

Although the public shows at the planetarium will end on June 7th, the planetarium will be available to classes, scout groups and summer camp groups for private shows during the summer months. Call Christine McKittrick at (815) 280-6682 between 7 am and 12:30 pm for more information.

May 4th will be the last of the evening Astronomy Shows sponsored by the Will County Forest Preserve at the Plum Creek Nature Center in Goodenow Grove Preserve. Call the Nature Center at (708) 946-2216 for more information.

Dr. Neil deGrasse-Tyson is arguably the most popular astrophysicist in the country. DeGrasse-Tyson is often seen as a guest on talk shows because he is not only an excellent teacher, but he is a superb entertainer as well. Many of his interviews are available on You Tube (search: *degrasse tyson*). These interviews are a great source for astronomy news presented in an enjoyable fashion.

The planetarium shows for May are on May 5th at 6:30 pm (*Comets, Asteroids, and Meteors*), May 10th at 7:30 pm (*Seasonal Skies - Skies of Summer*), May 19th at 6:30 pm (*Seasonal Skies - Skies of Summer*), and on May 24th at 7:30 pm (*Wonders of the Night Sky*). All the public shows are presented at no charge as a community service by Joliet Junior College.

A common misconception is that one of the reasons the average daily temperatures are rising is because we are moving closer to the sun. The Earth's orbit is elliptical rather than circular, and the distance to the sun can vary by 3 million miles, but we are closest to the sun in January and we will be moving away from the sun until July 4th. It is because the angle of the Earth's axis (23.5 degrees) causes the sun to appear higher in the sky during the summer, thus giving us more heat and energy, that the warm weather is approaching. (We are 580,000 miles *father* from the sun at the end of May than on May 1st.)

Because the sun is getting higher in the sky each day, and because the Earth is round, the further north you go the more minutes there are between sunrise and sunset. In Barrow, Alaska, the sun will rise on May 15th and won't set until July 30th. Twenty-four hours of golf - if you don't mind playing in 40 degree temperatures.

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