## The Night Sky

## **Storytelling in the Stars**

Every October evening a pageant of Greek mythology traverses the sky. The pageant is present in the form of the constellations visible at night. Constellations are the invention of human imagination, not of nature. The stars of a constellation have no physical connections with each other, but lie at widely different distances from the earth. Humans have attempted to impress a sense of order on the jumble of stars for both practical and aesthetic reasons. But the heavens were special, permanent and unchanging so this sense of order was not imposed lightly. The deeds and characters associated with the gods, sacred animals, and moral tales were placed among the stars as a lasting tribute. However, do not expect them to literally represent figures from mythology. Instead, they are meant to serve as symbolic representations of such figures, a celestial allegory for the myths handed down from the past.

The actual origins of most modern constellations appear to stem from 3000 to 4000 years ago. Numerous cultures from around the eastern Mediterranean region contributed to their creation. The resulting mix of constellations visible from the northern hemisphere has evolved into typically Greek based myths, characters or figures with Roman (Latin) names, and individual stars with Arabic names. The "Almagest", a treatise of all astronomical knowledge of the time, was written by the Greek astronomer Ptolemy in the 2<sup>nd</sup> century AD. It lists 48 constellations with direct ties to mythology. Perhaps the most famous of these myths is the story of Perseus and Andromeda. This is the classic tale of a hero slaying a monster to rescue a princess. Six of the characters from this myth are prominently seen in the fall and winter skies: Cassiopeia (the queen), Cepheus (the king), Cetus (the sea monster), Perseus (the hero), Andromeda (the princess), and Pegasus (the winged horse). By mid-October, all six are visible in the eastern sky at 9:00 PM, acting out a celestial play as they cross from the eastern horizon during the night.

Although the constellations are there to behold with the naked eye, the moon and planets are more interesting when viewed through a telescope. An opportunity for such views will be available at the second of this season's free public astronomy open houses at the ETSU Powell Observatory. The open house will be held on Saturday, October 16th from 8:00 to 10:00 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. Directions to the observatory can be found at <a href="http://www.etsu.edu/physics/etsuobs/obsmap.htm">http://www.etsu.edu/physics/etsuobs/obsmap.htm</a>.

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