Eye on the Sky – August 2009

By Nancy Alima Ali

SPECIAL CELESTIAL EVENTS

Perseid Meteor Shower
Peak Night: August 11-12
Get your wish list ready because August gives us many opportunities to wish upon a shooting star. "Shooting stars" are actually meteors, small particles of space dust that glow as they burn up from friction created by falling through the Earth's atmosphere. In this case, the meteors are caused by the debris left from a passing comet. Meteors can be seen anywhere in the sky but during showers they appear to radiate from a single point. In the case of the Perseids, the meteors appear to originate from the constellation Perseus.

The Perseid meteor shower is much anticipated by skywatchers because it is usually one of the best meteor showers of the year, with up to 60 meteors an hour. However, this year observers will have to contend with some competing light from the last quarter moon after midnight. For best viewing, find a location that is away from lights and has a clear view of the sky. Bring something comfortable to lie upon and be prepared to scan the sky for at least 30 minutes. Don't forget to wish for clear skies!

CONSTELLATION SPOTLIGHT: SCORPIUS
August is a great month to see the constellation Scorpius, the scorpion. Often it takes a great deal of imagination to see the pictures represented by constellations, but Scorpius is relatively easy. In Greek mythology, it represents a scorpion with a curved tail. In Hawaiian legend, it represents Maui's magical fishhook that was used to pull up the bottom of the ocean, thus creating the Hawaiian islands.

To find Scorpius, look for a large "J" in the southern part of the sky. As the constellation rises in the southeast after sunset at the beginning of the month, the "J" will appear upright. As the evening progresses, the "J" will begin to tip on its side until it sets about 1:00 a.m. in the southwest. Rising and setting times at the end of the month will be about two hours earlier.

NAKED-EYE PLANETS

Mercury
Fleet-footed Mercury moves into the evening sky this month, but you will need to be quick about catching it. Throughout August, look for Mercury low above the

western horizon after the sun sets. The closest planet to the sun doesn't stay in the sky for long after sunset, so take a look before 8:00 p.m.

Venus
If you are an early riser, look out for Venus. Rising at 3:15 a.m. early in the month (3:50 a.m. late in the month), this stunning planet is difficult to miss. Just look for the brightest "star" in the eastern sky, visible until sunrise. Look for the waning crescent moon in close conjunction with Venus in the early morning sky on August 17.

Mars
At magnitude 1.0, Mars can't compete with Venus in the brightness department, but it is still worth looking for in the early morning sky. Rising at 2:00 a.m. early in the month (1:26 a.m. on August 31), Mars is visible above the eastern horizon.

Jupiter
Blazing throughout August is Zeus' namesake planet, Jupiter. The largest of all planets in our solar system reaches opposition on August 14. At this time it is directly on the opposite side of the Earth from the sun, making it appear particularly bright (magnitude -2.9). Jupiter rises just before 8:00 p.m. and sets just after 7:00 a.m. at the beginning of August (5:43 p.m. rise and 4:55 a.m. set by the end of the month).

Saturn
The window of opportunity for viewing Saturn is quickly diminishing as this gas giant sets earlier and earlier each evening. On August 1, Saturn sets at 9:24 p.m, but by month's end, Saturn sets shortly after the sun at 7:36 p.m. To catch a view, look above the western horizon after sunset.

MOON PHASES
Full: August 5, 2:55 p.m.
Last Quarter: August 13, 8:55 a.m.
New: August 20, 12:01 a.m.
First Quarter: August 27, 1:42 a.m.

NOTE:
All times given are Hawaii Standard Time.

GOT QUESTIONS OR COMMENTS?
Please email nancyali@hawaii.edu or call 808-236-9169. The Hokulani Imaginarium at Windward Community College offers shows and special events for the public. For a schedule of Imaginarium offerings, visit http://aerospace.wcc.hawaii.edu/imaginarium.html.