

“The Sun, Four Planets and a Meteor Shower”, by Nicole Gauthier, Chief Docent, Cameron Park Rotary Community Observatory.

On Saturday, August 14<sup>th</sup> the Community Observatory in Placerville is hosting a special event from 6 PM – 11PM called the “The Sun, Four Planets and a Meteor Shower”. This event is free to the public and scheduled to start earlier than normal during daylight hours to take advantage of solar viewing. The Sun is finally becoming magnetically active again as it begins the upswing of its 11-year activity cycle. Solar docents will be on hand with specially-modified telescopes for a safe, entertaining view of sun spots, prominences and other surface activity on our very own star, the Sun.

On August 13<sup>th</sup> (the evening before the event) if you look to the West... Mercury, Venus, Mars and Saturn will be lined up with the crescent moon shortly after sunset. The next evening during the Observatory event, you will have the opportunity to view these planets in greater detail through the 14-inch reflector telescopes inside the Observatory and from telescopes located just outside the Observatory building where you will have an unobstructed view of these four planets shortly after sunset in the western sky.

In addition to viewing deep space objects through the many telescopes available on August 14<sup>th</sup>, visitors will be scanning the night sky for “shooting stars”. An increase in the number of “shooting stars” at a particular time of year is sometimes referred to as a meteor shower. Each August as the comet Swift-Tuttle orbits the Sun, it sheds an icy, dusty debris stream along its orbit. When the Earth travels through this stream, we are treated to a meteor shower. Depending on where Earth and the stream meet, meteors appear to fall from a particular place in the sky. This year during our special event, the constellation Perseus doesn't rise in the northeast until around 11 p.m. in mid-August. So while at the Observatory, the meteors will appear to be RISING (not falling) from starting points near the northeast horizon and moving overhead. That bit of geometry enables us to see meteors even before Perseus makes his appearance. Remember my earlier observation about a crescent moon the night before? This is particularly good news as the Perseids will be more visible to the naked eye this year without competing brilliant moonlight.

Treat meteor watching like you would the 4th of July fireworks. Pack a light jacket, comfortable chairs, blankets, bottled water (sorry no food or other drinks are allowed in the observatory), plus a red-filtered flashlight for reading maps and charts without ruining your night vision. Free August 2010 Sky Maps are available at the observatory and docents will provide hands-on instruction on how to get the most from your sky map as one of the evening activities.

As the event comes to a close at 11PM, after a 5-year stint in the southern celestial hemisphere, Jupiter will be positioned briefly north of the celestial equator providing die hard visitors an opportunity to view Jupiter and its four Galilean moons (Io, Europa, Ganymede and Callisto) before wrapping up their visit. For more information about the Cameron Park Rotary Community Observatory and the special event on Saturday, August 14<sup>th</sup> go to [www.communityobservatory.com](http://www.communityobservatory.com).

