Little Brother to the "Evening Star"

By Observatory Docent, LuAnn LePere

The planet Venus is often called the "Evening Star" during the times of the year when it appears on the horizon after sunset. Most often it is the first object shining in the gathering twilight and is often mistaken for a star. This month Venus has a companion object in the dusk.

Smaller, but still visible with the naked eye, planet Mercury makes an appearance this month in the evening sky. Although not a rare event, this viewing will be the best opportunity to see the tiny planet from the Northern Hemisphere this year. During the first two weeks of April, after sunset, Venus will be the brightest object in the western sky. Mercury can be seen to the lower right of Venus. By April 8, Mercury should appear at about an even distance from the horizon as Venus. During the second week of April, Mercury will appear to lower and dim until it disappears.

There are two reasons for the brief viewing window of this tiny planet. As the closest planet to the sun, Mercury's elliptical orbit hugs the sun at an average distance of 36 million miles. This limits the time that the planet is not obscured by the glare of the sun. Even during the time of the year when this small rocky planet is visible, it is only for a few hours at the most either before sunrise or right after sunset.

The other reason for the limited appearance of Mercury is the speed of its orbit around the sun. Mercury circles the sun about every 88 Earth days. This relatively rapid orbit accounts for the changes in position relative to Venus and the horizon from night to night over the first two weeks in April.

Mercury is the smallest planet in our solar system, about 3000 miles in diameter, only slightly larger than our Moon. It is made up mostly of rock and metal with a cratered surface. Little detail can be seen with ground based telescopes. It has a very thin atmosphere and temperatures can reach up to 800 degrees Fahrenheit during the "day" and -300 degrees in the dark.

The spacecraft Mariner 10 visited Mercury in 1974-1975 and mapped up to 45 percent of the planet. More recently, the Messenger program launched in 2004 reached the planet in January 2008. This mission enhanced and almost completed a map of the entire planet in three flybys to date. This time next year the spacecraft will go into orbit around Mercury to continue sending images and data about this small sun-blasted planet.

Meanwhile, the Evening Star's little brother shines brightly this month - don't miss it! And don't miss the Astronomy Day Open House on April 24, rain or shine at the Cameron Park Rotary Community Observatory in Placerville. For more information, see our website www.communityobservatory.com. The observatory is open to the public free of charge on Friday, Saturday and Sunday after dark, weather permitting.