

### Jolly Jupiter is showing off

**By Vernon Whetstone**

*Amateur Astronomer*

When English composer, Gustav Holst, wrote his orchestral suite, "The Planets," he gave a different musical identity to each planet. Mars he called "The Bringer of War," Venus he called, "The Bringer of Peace," but Jupiter he called, "The Bringer of Jollity."

These early evenings Jupiter is living up to its name.

At present the gas giant planet—the largest planet in our solar system—can be found in the east about an hour after local sunset. It is the brightest object in that direction.

It is easily found without any optical assistance, but, through a good pair of binoculars it is possible to see the four tiny pin-pricks of light that are the Galilean moons.

Through even a small telescope the moons will be in better view.

Even better, at present, Jupiter is at opposition. That means it is opposite the Sun in the sky so it rises at sunset, is up all night, and sets at sunrise.

On the evening of Christmas Day, Dec. 25, there will be a very close encounter between Jupiter and an almost-full moon.

Don't worry if you miss it, or it is cloudy. There will be other close encounters on Jan. 21, Feb. 17 (which will also include the Pleiades star cluster), and April 14.

If you are a morning person, or have occasion to be up early, there is still time to catch the three-planet waltz in the eastern sky about a half-hour before local sunrise.

Look to the southeast for very bright Venus. Up and to the right is the dimmer ringed-planet Saturn, and to the lower left is even dimmer Mercury. You might need binoculars to pull the tiny planet out of the brightening soup along the horizon.

Don't wait too long, both Mercury and Saturn are moving rapidly toward the horizon each day.

Now, if you are a person who likes to stay up all night, do I have a plan for you.

Tomorrow night, Thursday, Dec. 13, and on into the early hours of Friday morning, Dec. 14, is the peak time for the annual Geminid meteor shower.

The Geminids are named because they seem to be coming from the constellation Gemini. In fact, from near the area of the star Castor, the bright star on the upper part of the Castor/Pollux pair on the left side of the rectangle-shaped constellation.

The source of the meteors is the comet/asteroid 3200 Phaethon which leaves little bits of rock, dust, and other parts of itself each time it passes into the inner solar system and rounds the Sun.

Gemini is well above the eastern horizon by 8:30/9 p.m. MT in the east, just to the left of Orion. Predictions call for between 50 to 120 meteors per hour at the peak near midnight.

There will be no moon to get in the way, so find your favorite dark-sky spot, dress warm, bring a blanket or sleeping bag, a folding lounge chair, some hot chocolate, and some friends.

SKY WATCH: New moon, Thursday, Dec. 13. Super-skinny moon below and right of Mars

about an hour after local sunset. Still skinny moon above and left of Mars the next night.  
NEXT WEEK: Winter comets are coming; and more astronomical blathering.