Peter Komka/MTI via AP

The Milky Way galaxy and Jupiter, right, are pictured Saturday near Gemersky Jablonec, or Gomoralmagy in Hungarian, in southern Slovakia. Jupiter is in "opposition" in June, meaning it is at its closest to Earth, rising at sunset and visible all night.

Viewing Jupiter a treat in June

Largest planet is at its closest point to Earth

ALAN SHEIDLER POPULAR ASTRONOMY CLUB

This summer will be an excellent opportunity for anyone wanting to observe the two largest planets in our solar system: Jupiter and Saturn.

The fun begins with Jupiter, which reached what we call "opposition" Monda. When a planet reaches opposition, it rises at sunset. This means the planet will be visible all night long, thus affording us plenty of viewing time. At opposition, the Earth is exactly between the sun and the planet, which means the planet is as close to Earth as possible. Monday, Jupiter was 398 million miles from Earth, so it will be a great time to view the planet in a telescope because it will be larger in size and reveal more surface details than at any other time this year.

While the night of Jupiter's opposition is technically the closest approach to Earth, any clear evening during the months of June and July will be good opportunities to view the great Jovian planet. Grab your telescope and go out an hour after sunset and look to the East. You should see a very bright star looming above the eastern or south-eastern horizon. Point your telescope at this star to reveal its true nature.

Jupiter is the largest planet in our solar system. It is 11 times larger in diameter than Earth and is 318 times as massive (heavy). It is known as gas giant because it is composed of a mixture of gasses, and obviously it is giant in size. Not only is Jupiter the largest and heaviest planet, it also has the shortest day at slightly less than 9 hours 56 minutes. This means Jupiter is rotating at an incredibly fast 28,000 miles per hour at its equator! This superfast spin rate causes Jupiter to bulge at its equator and when viewed in the telescope, you should be able to notice a slightly oval shape (instead of a perfectly round shape).

As you marvel at Jupiter's shape as viewed in your telescope, look carefully at Jupiter's surface. You should be able to see two or more dark bands that run parallel to Jupiter's equator. These bands are not actually surface markings at all, but darker cloud layers in the atmosphere of Jupiter. Actually, all we see of Jupiter is its atmospheric clouds, which totally cover the entire planet. If you have a very good telescope you might be able to see swirls and vortices in these cloud bands. If you are lucky you might also be able to see the giant cyclone known as the Red Spot. This cyclonic storm changes in size, shape and color over time and is a fascinating sight.

As you gaze at Jupiter through your telescope, allow your eye to stray slightly to either side of the great planet. Do you see any "stars" nearby? If so, these are not stars, but the moons of Jupiter: Callisto, Europa, Ganymede and Io. Sometimes you can see all four, but at other times, one or two of them might be behind Jupiter (in Jupiter's shadow) or directly in front of Jupiter (transiting). It is difficult to pick out a transiting moon, but you might be able to see its shadow on Jupiter's surface, which will look like a dark spot. This is an amazing sight and because Jupiter's moons move very fast, you can watch them move. It is fantastic opportunity to observe orbital motion in real time.

Jupiter and its moons are an amazing telescopic sight. If you have a telescope, be sure to take the opportunity to observe it this summer. If not, no problem, join the Popular Astronomy Club on the evening of Saturday, June 15, at Niabi Zoo when we will have a free public observing session where you can look through club members' telescopes.