

# Saturn — Lord of the Rings

Neel Roberts  
The Sky's the Limit

Oxford Professor J. R. R. Tolkien might not be a name that immediately rings a bell, but his trilogy (*The Fellowship of the Ring*, *The Two Towers* and *The Return of the King*), fantasy epic *Lord of the Rings* is no stranger to most 21st century sci-fi fans. After all, if you sold more than 150 million copies, the second best-selling novel in the world next to Charles Dickens' *Tale of Two Cities*, it's hard not to be renowned. Saturn, believed to have been discovered by the ancient Babylonians around 2,000 BC, is famous because of its planetary rings but known as "Lord of the Rings" for a different reason. Until 1609, when Galileo developed his telescope, no one had any idea planets had anything but empty space surrounding them. Interestingly, when he first sketched the rings, it was as cup handles because the idea of anything circling planets seemed so out of concept for anyone. Galileo went on to discover planetary moons and centuries later Saturn gained the reputation of being the only planet with rings.

For those of us who are old enough to remember

the launching of Voyagers 1 and 2, we were not only shocked to discover other planets had rings, but they came in a variety of boot. Discovered in 1979 by Voyager 1, Jupiter's four main rings are almost perfectly 0 degrees flat, but much thinner. Voyager 2 photographed Uranus's rings in 1986 upside down at 90 (which match its rotation) with six thin rings and four dusty ones. Three years later in 1989 is when Neptune was photographed by the same spacecraft. Its rings are on a similar angle to Saturn with about nine distinct ones. However, the most amazing possible candidate was the Saturnian moon Rhea, reported in 2008. The Cassini orbiter since 2005 has detected a pattern of depletion that is best explained by assuming the electrons are absorbed by solid material in the form of an equatorial disk. These contain within several denser rings or arcs, of particles perhaps several decimetres to approximately a metre in diameter. While it's not a confirmed ringed sphere, one thing for sure is its mother planet Saturn still holds the title of "Lord of the Rings!"

**Sky watch for the next month**

Jupiter at opposition to

Earth on Oct. 29 just after 6 p.m. in the northeast-east. You can see with your eyes the king of planets or with a good set of binoculars. You'll be able to see some of the details in Jupiter's cloud bands and its four largest moons, appearing as bright dots on either side of the planet.

The Orinoids Meteor Shower peaks on Oct. 21, 1-2 hours before dawn just to the north of constellation Orion's bright star Betelgeuse. With the second-fastest entry velocity of the annual showers at 20 per hour, meteors from the Orionids produce yellow and green colors and have been known to produce an odd fireball. Best viewing will be to the east after midnight.

Zodiacal Light — did you catch this last month? It's a faint, roughly triangular, whitish glow seen in the night sky extended up from the vicinity of the sun along the ecliptic or zodiac. The best time to see it is from Oct. 24 for two weeks in the northeast before dawn.

**Public Events for the next month**

The Saturday Observer's Night, hosted by the All Star Telescope (<http://www.all-star-telescope.com/>) just outside Didsbury, takes

place Oct. 29 from 8 p.m. until midnight. This full facility telescope dealer has a heated showroom, with refreshments, washrooms and everything is provided for no charge. I am planning to attend and you are welcome to caravan with a group I am assembling leaving Vulcan around 4:30 p.m., weather permitting. We stop for a Chinese buffet before heading to the celestial farm for the evening. For more information contact Ken From at 866-310-8844, or visit [www.all-star-telescope.com/index.php/Observer-Nights.html](http://www.all-star-telescope.com/index.php/Observer-Nights.html).

**Monthly Public Stargazing at the Trek Station**

Did you join us last month? We had a great start to the fall season with what will be a monthly event into the spring, so don't hesitate to get involved. We'll check out the Hunter's moon rising and much more this evening (Oct. 12) after dinner at 6:30 p.m. weather permitting. A small indoor presentation will be followed by stargazing (weather pending). Treats and refreshments are provided free of charge and all are welcome.

For more information, contact the Trek Station at 403-485-2994 and the website [www.vulcantourism.com](http://www.vulcantourism.com).