

Will you live to see a “Supernova”?

Unless you are very young, you will no doubt remember the terrorist attacks on the World Trade Twin Towers 9 years ago. Despite being inundated with bad news nowadays, somehow this event remains permanently embedded in our mindset compared to any other catastrophe. Why is this case? I'm not a psychologist but my guess would be that occurrences of incredible impression not only become anchored for life but are unforgettable.

So on that note, is there a celestial comparison? The Crab Nebula (M1) is the result of a supernova (when a star, like our sun, runs out of fuel) that detonated in 1054 AD. Exploding around early May of that year, it reached peak intensity of about -7 magnitude which is not only the brightness object in the night sky (outside of the moon) but was luminous enough to see in plain daylight for 2 months.

Are we close to experiencing one? Betelgeuse, 640 light-years from Earth is close to going supernova and with an estimated magnitude of -12 upon ignition; it would expel gases as large as our Solar System for months. Without a doubt, this would now be the brightest object ever seen night or day with the close exception of our sun (-26); the sites legends are made of!

Sky watch for the next month:

- 1 **Moon Perigee and Apogee-** on Tuesday, September 07th, the moon will be at its closest (perigee) point to the Earth, so watch for large tides. Likewise on Tuesday, September 21st at 02:00 and it will be at its furthest point-apogee.
- 2 **Venus-** Will be at its brightest point Thursday, September 23rd before it sets in the SWW horizon.
- 3 **Fall Equinox-** Officially arrives Wednesday, September 22nd, at 21:09 in the evening the same time a full moon will be out in the SEE.
- 4 **Zodiacal Light-** is a faint, roughly triangular, whitish glow seen in the night sky which appears to extend up from the vicinity of the sun along the ecliptic or zodiac. First discovered by the astronomer Giovanni Domenico Cassini in 1683 and later explained by Nicolas Fatio de Duillier in 1684, it can be hard to find and the best time is from Sunday, September 05th for 2 weeks in the North East before dawn.

Public Events for the next month:

Alberta Star Party- Hosted by the Royal Astronomical Society of Canada-Calgary in the Starland Recreation Area Campground near Drumheller (www.starlandcounty.com) Friday September 10th to Sunday the 12th. Camping fee is \$15per night and all are welcome. For further information contact the RASC president Roland Dechesne (403)510-4330, Roland.Dechesne@cnrl.com, <http://astronomycalgary.com/events/info/155>.

Rothney Observatory Open House – Terror from the Skies Speaker Jeroen Stil The universe is a dangerous place. Dr. Stil will uncover the celestial objects that go bump in the night. Find out just how safe our little blue planet really is and how far away the danger lies. View celestial objects through our telescopes, including the 1.8 metre ARCT, one of the largest telescopes in Canada. \$20 per car at the Rothney Astrophysical Observatory located near Priddis, about 30 km southwest of Calgary, Saturday, September 18th 8-11 pm. For further information contact Jennifer Howse, (403)931-2366, <http://astronomycalgary.com/events/info/60>.

Happy fall and shorter days!

Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada-the nation's leading astronomy club founded in 1849 with over 4,000 members and 29 centers across Canada. Neel welcomes your questions and comments at (403)485-2683, Neel_Roberts@ptccanada.com. The members meet once a month in various places in Southern Alberta/Canada and you can check them out at www.calgary.rasc.ca!