Nebulas – jewels of the cosmos

Neel Roberts
The Sky's the Limit

Call them chaotic or breathtaking — their beauty occupies varied emptiness of space. Nebulas, which originate from the Greek word "clouds," are everything in the galaxy that stars are not. They present themselves in a variety of shapes and sizes ranging in luminosity from discreetly dark to glowingly bright bearing every colour from the spectrum. Even more amazing, they mysteriously take on appearances of objects that are remarkably familiar like animals, insects and even continents! Most astronomers agree these are the crown jewels of space, and while St. Patrick's Day is associated with ornament items like the shamrock and "pot of gold" (at the end of a rainbow of course), they don't compare to these heavenly adornments. While we all know the pot of gold is a myth, did you know the three leaved clovers were actually used by St. Patrick to represents the Holy Trinity in the Bible?

Evolutionary scientists teach that gaseous clouds like the Eagle Nebula (M16) are a nursery for stars, yet no one has actually seen a star born. In 1054 AD Chinese and Arab astronomers noted the supernova of a star so bright, that it shone during the daylight for 29 days. This reminisce today is what we call the Crab Nebula (M1) and in more modern times, SN1987A was an observable supernova that could have been seen with the naked eye for several months in the southern hemisphere. So what does the evidence tell us? Nebulas seem to be legacies and not birthplaces for stars.

One of the most observable clouds is the Orion Nebula (M42) located in the knife of Orion. You don't need a scope to see this but to give you an idea of the actual size of this, if we brought it as close to Earth as our closest star (Proxima Century) 4.2 light years away, it would completely dominate out skyline and outside of the sun, we would not be able to see anything. Coincidence? This St. Patrick's Day, celebrate the spiritual meaning of the occasion. As you lift up a mug of green suds to the heavens with the nebulas in the background, give credence to creation.

Sky watch for the next month

Emission nebula next to Moon on Daylights Savings Day: While you turn your clocks ahead this Sunday morning, the Emission Nebula will be almost 90 degrees on the bright side of the moon from 7 p.m. until they set after 3 a.m. in the northwest.

Jupiter at perihelion: The king planet will be at its closest to the Sun on March 17, so the best time to catch it is from 6-7 p.m. setting in the west.

Orion Nebula at the Trek Station: This one of the rare gas clouds that you can see regularly with the naked eye, but if you want to see it through the scope, come on down March 18 at 7 p.m. and we'll focus on it after sunset until it disappears around 11 p.m. in the west horizon.

Zodiacal light at spring equinox: As mentioned in previous articles, this will be visible in the northern latitude, west view, from early evening twilight on March 21 for the next two weeks. 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.

Public events for the next month

Monthly Public Stargazing at the Trek Centre : This will be our third monthly meeting at the Trek Centre. If you've never come, don't hesitate to get involved, as it's a great family event. We'll check out the full moon rising on March 19 at 8 p.m. with the Orion/Crab Nebula and much more, weather permitting.

Treats and refreshments are provided free of charge and all are welcome. For further information, contact the Vulcan Tourism and Trek Station at 403-485-2994.

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