

Spooky Nebulas a Halloween delight

What do cats, skulls, ghosts and witches have in common?

They all have nebulas named after them.

While you would have thought it's somehow hooked into Halloween, these jewels of the universe are here all year round.

About 3,000 light years away the Cat's Eye is a dying star throws off shells of glowing gas while NGC 6334, the Cat's Paw is a vast region of cosmic dust about 5,500 light-years from earth in the constellation of Scorpius 50 light years across.

The Screaming Skull, SH2-68, looks like a giant screaming head with flaming hair, streaking across the Milky Way 45,000 light years away while the Skull Nebula, NGC 246 is 1,600 light years away in the constellation of Cetus.

The Ghost Head Nebula, NGC 2080 in the Large Magellanic Cloud, a satellite galaxy of our own Milky Way Galaxy while the ghost-like nebulas, IRAS 05437+2502, includes an enigmatic cloud filled with dark dust that was first noted in images taken by the 1983 IRAS satellite in infrared light.

Lastly, the 900-light year Witch's Nebula, IC 2118 is a gas cloud illuminated by nearby supergiant star Rigel in Orion while the 1,470-light-



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year Witch's Broom, NGC 6960, is part of the Veil Nebula; a cloud of heated and ionized gas and dust in the constellation Cygnus.

There are also wizards, eyes, hands, owls and even a tarantula nebula to scare you.

Sky watch for the next month:

- Draconid Meteor Shower Peaks — Friday, Oct. 7 best seen after twilight facing north high up. While not as dramatic

as other showers it can occasionally spew hundreds an hour, but will be reduced visibility by the waxing, crescent moon.

- Mercury greatest distance from rising Sun — Thursday, Oct. 15 starting at dawn before 7:30 a.m., Mercury will be right angled to the rising Sun and greatest distance on the rise.

- Orionids Meteor Shower Peaks — Saturday, Oct. 21, one to two 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 10 to 20 per hour, meteors from the Orionids produce yellow and green colours and have been known to produce an odd fireball. With the waning gibbous Moon glare will reduce visibility.



Photos by Neel Roberts

Regulars John Usborne and wife Ela Thakore of Twin Valley line up to look through the 11-inch telescope.

- Six planet Halloween dusk — Monday, Oct. 31 Saturn and Venus S.W., Mars and Pluto S.S.W., Neptune S.E. and Uranus East.

Public events for the next month:

Monthly Public Stargazing at the Trek Center. Have you checked us out this year? We've had a great year so far, so don't hesitate to get involved.

We'll talk about October meteor showers and more on Friday, Oct. 14 starting at 7:30 p.m. Small indoor presentation followed by stargazing through our 11-inch telescope and more, weather pending. Refreshments provided free of charge. Everyone is welcome.

Experts are on hand the second Friday monthly to explain the heavens, teach scoping skills and help you

develop your knowledge of the sky. For further information, contact the Trek Center at 403-485-2994.

The website www.vulcantourism.com will be updated regularly.

Happy Fall and cooler 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 more than 4,000 members and 29 centres across Canada. He welcomes your questions and comments at 403-560-6574 or email: Neel_Roberts@ptccanada.com. The members meet the second Friday monthly at the Trek Center in Vulcan and you can check them out online at: <http://calgary.rasc.ca/vulcan2014.htm>.



Observers can spot solar spots with use of special filters.