## Alberta starwatchers solve Aurora enigma

A recent April 22, 2017 viral article by *Russia Today* called "Magnetic field of dreams: Amateur stargazers help solve mystery of unknown aurora" speaks volumes for the conscientiousness of our local astronomers.

Launched Nov. 22, 2013, the European Space Agency's "SWARM" 3 satellites went on a mission to study the Earth's most mysterious aspects of our planet: the magnetic field. While

invisible, the magnetic field and electric currents in and around Earth produce complex forces that have vast impact on everyday life. Alberta stargazers from Alberta Aurora Chasers (https://www. facebook.com/groups/AlbertaAurora Chasers) have teamed up with academic local expert Professor Eric Donovan of the University of Calgary to solve the mystery of a previously unknown aurora in the night sky above Alberta, Canada known as "Steve."

Donovan matched a sighting of 'Steve' to readings collected from one of the satellites routine passovers and concluded, "It turns out that Steve is remarkably common, but we hadn't noticed it before. It's thanks to groundbased observations, satellites, access to



data, and an army of citizen scientists joining forces to document it."

Donavan confirms Alberta stargazers are diligent when it comes to the night sky. No surprise the RASC Calgary has done nothing but grow since it's inception and on course to being the biggest chapter of the 29 in Canada.

## Sky watch for the next month:

• Full Moon on top of Pluto — On Sunday, July 9 look below the Moon with

a scope and you'll see Pluto all night.

• Mercury next to Beehive Cluster M44 — On Monday, July 10 after sunset, look SEE for a couple of hours before they set for the night.

• Pre-Dawn Venus and Crescent Moon — On Thursday, July 20 look NEE at

3:30 a.m. as they rise into the dawn sky.Delta Aquarids Meter Shower Peak —

On Thursday, July 27 look in the southern sky a few hours before dawn as it expected debris from comet 96P Machholz will fall at a rate of 15-20 per hour. The Moonless nights make it easy to enjoy.

**Public Events for the next month:** Milky Way Night at the Rothney Observatory near Priddis — Thursday, July 20 to Saturday, July 22 from



Photos by Neel Roberts

Smartphone pictures are taken though the 11-inch Celesteron telescope during the daylight.

10 p.m. to 2 a.m. am are special evenings at the observatory dedicated to solely observing the night sky. There will be an array of telescopes operated by University of Calgary astronomers and members of the Royal Astronomical Society of Canada Calgary. You will have the opportunity to look through the telescopes, and astronomers will be on hand to answer questions. More information available online at: www.ucalgary.ca/rao/.

RASC Annual Star-B-Q — Join us for some good times and great viewing under wonderfully dark skies. \$20 per vehicle and Saturday buffet is \$21 per person July 21-23 with all-weekend camping at Eccles Ranch Observatory just north of Caroline, Alta. For further information contact Roland Dechesne at 403-510-4330 or email: Roland. Dechesne@cnrl.com. See: http://calgary. rasc.ca/starbq.htm.

Happy long days of summer and keep reaching for the sky.

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 5,000 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 at 7:30 p.m. and you can find out about membership at: http://calgary.rasc.ca/ vulcan2017.htm.