

RASC SUDBURY CENTRE

Club Website

www.sudburyastronomyclub.com



Fri March 6, 2020

Time 7:30 pm

March Meeting Agenda

- | | |
|---|-----------------|
| 1) President's Address | Alan Ward |
| 2) Survey-0Interesting Topics for future meetings | |
| 3) The Planets | Robert Pothier |
| 4) Mini Lecture Series—Bellatrix | Stargazer Steve |
| 5) Show and Tell—The Jedi Force Levitator Fun weith Electrostatic Repulsion | |
| 6) Break | |
| 7) Feature Presentation—Betelgeuse, What's Next | Paul-Emile |
| 8) Darken The Dome | |

Your 2020 Executive

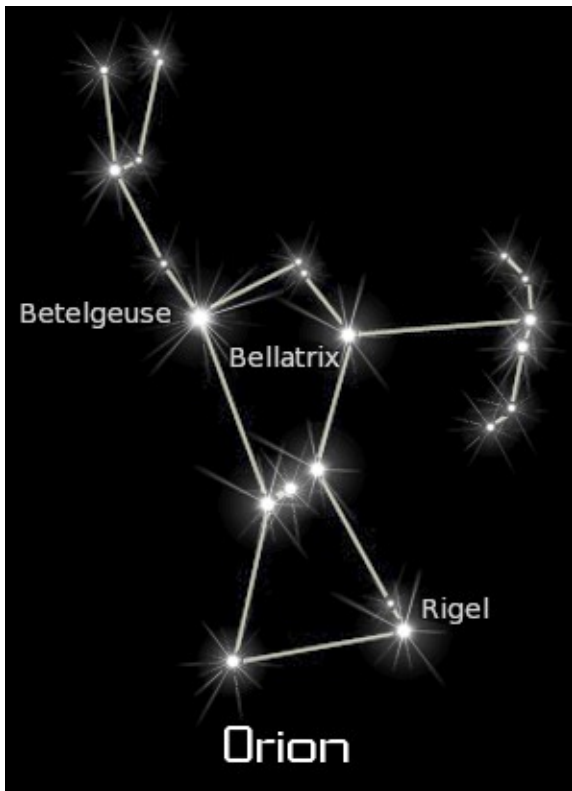
President	Alan Ward	Vice President	Pete Marshall
Past President	Robert Pothier	Secretary	Norm Hey
Treasurer	Monique Martel	Observatory Chair	Luc Comtois
Director of Outreach	Linda Pulliah		



This Photo of M104, the Sombrero Galaxy, was taken by Robert Pothier on Feb.23rd from his back yard.

10 inch Meade LX-200 @ f/30

15 exposures of 2 minutes each, stacked with Registax5



The Shoulders of the Hunter

Steve Dodson, Stargazer Steve

The familiar nearly-rectangular shape of Orion the Hunter adorns early-evening Winter skies, with bright reddish Betelgeuse in the upper left corner, even brighter bluish Rigel at the lower right, and the remarkable line-up of 3 shiny "belt" stars in between. But take a fresh look! This classic picture is not quite right!

Betelgeuse, Orion's "left" shoulder, is usually quite a bit brighter than Bellatrix, the "right" shoulder star. The Red Giant at the left shoulder is a variable star, as our eyes can easily verify over time, but normal it is always brighter than Pollux, in nearby Gemini, and sometimes it is nearly as bright as Rigel. But now the two shoulder stars appear at a glance to be equally dim. Betelgeuse has broken through the faint end of its normal brightness range, and no one really knows why it has dimmed down this year! Paul Emile Legault will provide some insight into what might be going on inside this star at our March meeting.

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Even now that Betelgeuse appears as the equal of Bellatrix, it is actually an extreme Super Giant twice as far away - 550 light years distant. It has 18 or 19 times the Sun's mass, and 760 times girth. Dim as it has become, it still provides some 30,000 times the Sun's light!

Even though it was "born" only 10 million years ago, and thus is half the age of Bellatrix, Betelgeuse has already used up the hydrogen in its core. It is now in the next stage of its life "burning" helium into Carbon and Oxygen. Bellatrix, a very ordinary blue giant of 9 solar masses, burns through its fuel more slowly, and still has enough hydrogen in its core to last another 7 million years. In that distant future it will also swell into a bloated helium-burning giant.

In contrast, our own more modest star, the Sun, is relatively frugal with its

Star party dates 2020

Frozen Banana May 21-24 Mew Lake, Algonquin Provincial Park

New Moon in June -June 18-21 Grundy Lake Provincial Park

Gateway to the Universe July 16-19 Samuel de Champlain Provincial Park

August Star Party Aug 13-16 Bobland

Half the Night Aug 27-30 Halfway Lake Provincial Park

Last Chance Sept 17-20 Restoule Provincial Park

Stars Over Killarney Stars Sept 26 (24-27) Killarney Provincial Park

Possibly the River & Sky Festival near Field, Ontario, as well as a small star-party at Restoule. Details will be provided.

Star Parties with Science North, 2020

March 20	March Break	8:00 pm	Moon 3% Waning
April 3		8:30 pm	Moon 75% Waxing
May 2	Spring Astronomy Day	9:15 pm	Moon 60% Waxing
May 29		9:45 pm	Moon 48% Waxing
June 26		10:15 pm	Moon 32% Waxing
July 24		9:45 pm	Moon 19% Waxing
August 7		9:30 pm	Moon 85% Waning
August 21		9:00 pm	Moon 9% Waxing
Sept 26	Fall Astronomy Day	8:00 pm	Moon 75% Waxing

(This is Stars Over Killarney)

All Star Parties to be held at Science North except Sept. 26

Our Valued Partners



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stargazer Steve

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705 692-3214



***The Car Lot etc.
Sudbury, ON***



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Regent St.
Sudbury**

STARGAZER STEVE

WHO IS STARGAZER STEVE!!

and What does he do?

Steve Dodson is a fellow amateur astronomer, who as a 2nd grader saved his allowance for a Telescope, and made his first 6-inch scope in grade 8.

As **Stargazer Steve**, he makes Telescopes that are designed to give more observing satisfaction to beginners and experts alike, by focusing on design for performance.

In 1981, already an amateur astronomer with decades of observing experience, Steve built the largest mobile Telescope in Canada, and brought it to the Star Party that launched the Sudbury Astronomy Club.

In the 1990's Steve pioneered high-performance low-cost Reflecting Telescope Kits.

Steve has participated in the building of over 4000 Telescopes, including solo projects and activities with children, Astronomy Clubs and people of all ages.

The International Astronomical Union has named **Asteroid #13822** "Stevedodson".

Over **2000 Stargazer Steve Telescopes** have been shipped throughout Canada, the US, and around the World.

More Info at <http://stargazer.isys.ca>
<http://neo.jpl.nasa.gov/orbits/> (Put 13822 in the blue box)

