

2018 RASC Windsor Centre Observing Events

Compiled by Mahayarrahh-Starr Livingstone

**Saturday April 14, 8:45 p.m. (sunset at 8:12 p.m.) Moon is 27 days old
Booked Homeschool**

Saturday April 21, Point Pelee RASC Hosted night -- Frog Program

Saturday May 12, Science Rendezvous at U of W -- Solar viewing outside display inside

**Saturday May 19, 9:15 p.m. (sunset at 8:51 p.m.) Moon is 4 days old
Booked Homeschool**

Saturday May 26, Roundhouse Shopping Centre - Booth Display and Solar viewing

**Saturday June 9, 9:45 p.m. (sunset at 9:07 p.m.) Moon is 24 days old
Booked Essex Scouts**

Saturday June 16, Point Pelee RASC hosted night

Saturday July 21, 9:30 p.m. (sunset at 9:03 p.m.) Moon is 9 days old

Saturday - Sunday August 11-12, Point Pelee Perseids Meteor Shower - West Beach – New moon. Starfest is also August 9-12

Saturday August 18, 9:00 p.m. (sunset at 8:28 p.m.) Moon is First Quarter

Saturday September 15, National ALL CENTRES STAR PARTY - Possible date for our Barbeque

Saturday September 22, 8:15 p.m. (sunset at 6:57 p.m.) Moon is 13 days old

Saturday October 6, 7:15 p.m. (sunset at 7:04 p.m.) Moon is 27 days old

Saturday October 13, Point Pelee RASC Hosted night

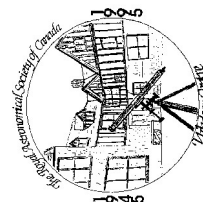
Daylight Savings Time ends on Sunday, November 4 at 2:00 a.m. Clocks back one hour.

Saturday November 10, 7:00 p.m. (sunset at 5:14 p.m.) Moon is 3 days old

Friday December 7, Annual December Social - Ojibway Park Nature Centre

Saturday December 8, Point Pelee RASC Hosted Night—Geminid Meteors

Saturday December 15, 7:00 p.m. (sunset at 5:00 p.m.) Moon is First Quarter



AURORA



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The Royal Astronomical Society of Canada - Windsor Centre

April 2018

Flyer

Next Meeting

Tuesday, May 15, 2018
7:30 p.m.

at

[Ojibway Park Nature Centre](#)
5200 Matchette Road

Speaker:

Kate Helsen
Don Wright Faculty of Music
Western University

Topic:

***“Astronomy and Music -
Holst’s: The Planets”***

Upcoming Events

Lyrid Meteor Shower: Peak on Sunday April 22nd and the first quarter moon sets about 1:30 a.m. EDT. The best time to look will be in the early morning of April 22nd before sunrise.

Eta Aquarid Meteor Shower: Peak on Sunday May 6 however moonlit skies will interfere. The best time to look will be before dawn on Sunday May 6th.

Jupiter Opposition: Jupiter reaches opposition on Tuesday May 8 at 9:00 p.m. EDT. Jupiter will be rising in the SE as the sun sets and be visible all night.

Science Rendezvous: On Saturday May 12th from 10:00 a.m. - 4:00 p.m. we will be participating in the annual **Science Rendezvous**. The event will be in the Education Gym and CAW Centre at the University of Windsor. Weather permitting there will also be telescopes set up outside for safe Solar observing.

Monthly Meeting Minutes

March 20, 2018

The monthly meeting of the Royal Astronomical Society of Canada - Windsor Centre was held at the Ojibway Park Nature Centre.

Windsor Centre **President, Mike Mastronardi** chaired the meeting. Mike called the meeting to order at 7:30 p.m. and welcomed members and guests to the Ojibway Park Nature Centre.

Mike invited members to review the **minutes of the February 20, 2018 meeting** which were printed in the Aurora newsletter. A **motion to accept the minutes** of the February 20, 2018 meeting was made by Steve Mastellotto and seconded by Susan Sawyer-Beaulieu, the **MOTION CARRIED**.

Mike provided an overview of the meeting and introduced the main presentation.

Main Presentation

Juliana Grigorescu took the floor for the main presentation: “**The Electromagnetic Spectrum**”.

Juliana started with a basic explanation of the electromagnetic spectrum, and size of the **wavelengths** described within. All the **radiation detected in the universe** are described here. She explained the small section of **visible light** which we can see and the extremes on either end of the spectrum which represent **radio waves**. The less energetic waves have longer wavelengths and the more energetic waves have **very short, energetic wavelengths. (gamma and x-rays)**. We can't see but can feel infrared wave.

She described in detail how waves are explained in **frequency and wavelength**. Our ancestors used visible light but today we can detect radio waves which make it to Earth. **Planck's equation** of the connection between energy and frequency was a revolution and the beginning of **quantum physics**.

Forty kilometers above the atmosphere we can detect radiation quite easily. She demonstrated the different views of the **Crab nebula** using different wavelengths. Radio – X-ray - visible light. She demonstrated the Milky Way through various detecting machines.

Sources of x-rays:

- The Sun isn't hot enough to emit x-rays, only 6,000K. But with a solar eclipse we see the **corona** which is MUCH hotter and does emit x-rays.
- In 1962 the **first x-ray source outside the solar system** was detected from a neutron star and a white dwarf star.
- Clusters of galaxies (**Virgo Cluster**) also emit x-ray radiation.
- Giant planets like **Jupiter** emit x-rays as well

- Inside giant **star forming regions**, when matter falls on to the stars x-ray radiation may emit.

After the **coffee break**, a **50/50 draw** was held, lucky winner went home with their earnings.

Director of Observing Report

Nancy Ng and Jessie Passa presented the DofO report together. They opened with a sombre slide showing Dr. Hawking at different phases in his life.

Jessie spoke in some detail on the vernal equinox, the tilt of Earth's axis causing our seasons. Also comparing the areas on the Earth where the Sun is focused on during the winter and summer solstices. Some photos of the membership were shown, which include; the Whale Galaxy by **Steve Mastellotto**. **Randy Groundwater's** shot of the Mercury and Venus conjunction over the Detroit skyline was a huge hit!

Two planispheres were shown with the upcoming placement of the constellations for March and April. Noting that we are **losing the winter constellations** and by April 17th, at 9:30 p.m. we begin to see the **Virgo and Bootes** targets.

Nancy tried to entice existing members to the **Hallam Observatory**; even if it is to sit on the deck **with binoculars to enjoy the dark skies**. Two night sky views were shown, Windsor and at the Observatory, showing the contrast between the darkness and clarity.

Jessie explained the “**Blue Moon**” misunderstanding. There were **2 full moons** this past **January** and now **2 full moons in March**. Having 2 Blue Moons in one year is explained by the **metonic cycle**. This is a period of 19 years which brings the moon back to the same place in reference to the stars. In 19 years there are 228 calendar months and 235 full moons so we have 7 extra full moons that get squeezed in. Jessie finished off with a note on the **Parker Solar probe** being launched this summer. On NASA's website, featuring the solar scope, anyone can sign up, for free, to **have their names etched into a microchip**, and take a ride to the Sun.

Tom Sobocan provided a tribute to the late **Stephen Hawking**.

REMINDER: Astro Luncheon at **SKIPPY'S RESTAURANT** every second Wednesday of the month, at noon. Located at 954 University Ave West, Windsor.

Mike thanked everyone for coming out to the meeting and reminded everyone that the **next regular membership meeting** would take place on **April 17th, 2017 at 7:30 p.m.**

Meeting adjourned at 9:25 p.m. February 20, 2017.

Recorded by Nancy Ng, RASC Windsor Centre Treasurer