

## March Meeting Minutes (continued)

dust rings. **Mercury** exhibits a disk of dust.

- **March 21st to April 5th** look for the Zodiacal light in the evening sky
- **March 25th** there is a double shadow transit on **Jupiter, Europa and Ganymede** shadows Jupiter
- **March 27th** in the predawn sky – **Jupiter and the moon**—sometimes seen during the day
- **March 30th** look for **Mars** joining the Seven Sisters
- **April 17th** predawn sky - **Mercury and Venus** appulse

### Astronomy News

1. A group of scientists from India discovered a **super cluster** of 300,000 galaxies
2. Europe – discovered **200,000 galaxies** using radio telescopes. Detected radio emissions.
3. International team astronomers North America and South America discovered that there are more galaxies in a cluster. Using software they measure the motion of the galaxies.

### Space News

1. **Spirit and Opportunity**, two Mars rovers are official dead. A wind on Mars cleaned the panels.
2. **SpaceX Falcon9** rocket officially launched on February 21st. It will take 7 weeks to reach its destination.

**Reminders:** Astro Luncheon at **Skippy's Restaurant** every second Wednesday of the month, at noon Located at 954 University Ave West, Windsor.

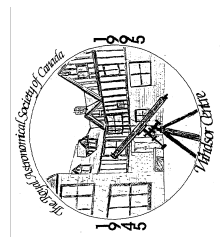
**Mike** thanked everyone for coming out to the meeting and reminded everyone that the **next regular membership meeting** would take place on **April 16th 2019**.

**Meeting adjourned at 10:12 p.m.** March 19, 2019.

Recorded by Sandy van Gaalen, RASC Windsor Centre



# AURORA



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The Royal Astronomical Society of Canada - Windsor Centre

April 2019

## Flyer

### Next Meeting

Tuesday, May 21, 2019  
7:30 p.m.

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

Speaker: Steve Pellarin

Topic: *Revolutionary Discoveries  
of Early 20th Century Astronomers*

### Upcoming Events

**Mercury and Venus:** Are 4 degrees apart in the morning sky of **April 16/17**.

**Lyrid Meteor Shower:** Peaks on **Monday April 22nd** but the just past full moon will interfere.

**Eta Aquarid Meteor Shower:** Peak on **Monday May 6** and the nearly new moon will not interfere. The best time to look will be before dawn on Monday May 6th.

**Science Rendezvous:** On Saturday **May 11th** from 10:00 a.m. - 3:30 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.

**Mars:** Will be passing just **18 arc minutes** from the **open cluster M35** in Gemini on **Sunday May 19th**. The view is almost as good the night before when they will be **19 arc minutes** apart.

## Monthly Meeting Minutes March 19, 2019

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 7:42 p.m. and welcomed members and guests to the Ojibway Park Nature Centre.

Mike invited members to review the **minutes of the February 19, 2019** meeting which were printed in the Aurora Flyer. A **motion to accept the minutes** of the February 19, 2019 meeting was made by Steve Mastellotto and seconded by Mahayarralh-Starr Livingstone. **MOTION CARRIED.**

**Mike** provided an overview of the meeting and introduced the main speaker for the evening.

### Main Presentation

Mike welcomed **Gary Ross** to the floor for his talk – *“The Rehabilitation of Percival Lowell”*. Percival Lowell was a man of much knowledge, wealth and imagination. A biography written by his brother **Adam Lowell** indicates how much of Percival Lowell’s life was influence by many great people, quotes and findings of the time.

Patterson states it is a mistake to think everything has been discovered. Quotes that God buries their workers but not their work. Also influenced by Tesla (1901) and Marconi (1921). In 1922 – 1924 the U.S. Government in search of extra-terrestrial intelligence asked for radio silence over the Pacific, all night for three nights straight to receive **transmission of any sort from Mars.**

Many more Scientist / Astronomers of the time were mentioned along with their contribution of knowledge and/or philosophy to science including:

- Tesla 1856-1943,
- Slipher 1875-1969
- Jackson & Moore 1965
- Nicolas of Cusa 1401-1464

Although Percival Lowell had many quests, his **contributions to astronomy** were numerous. He made contributions to equipment, methods and awareness. Percival Lowell also wrote many books such as **Mars As The Abode of Life, Mars And Its Canals, Soul Of The Far East**, etc. He founded the **Lowell Observatory in Flagstaff Arizona** and was best know for his speculations that there was **life on Mars.**

**Mike thanked Gary Ross for his presentation.**

Mike mentioned the **2019 Hallam/Point Peele Events List** and volunteers are needed for the group bookings at Hallam.

**Tom Sobocan** mentioned that members are welcomed to bring in any memorabilia for the May meeting on **“Apollo 11 the first moon landing”** to share.

We have use of the **Art Gallery** at the end of November and need to take advantage of this to make awareness. Could use **art work, pictures, poetry** or anything relating to Astronomy.

We ask that consideration be given in fund raising/marketing to set up a booth at the **Comber Fair**. They have 10,000 people from throughout Essex and Kent county pass through their gates in 3 days. Most people in Comber are not aware of the Observatory. Also consider the **Harrow Fair.**

**Green Lasers** available for **\$5** see Starr to order.

After the **coffee break**, a **50/50** draw was held, **Sandra van Gaalen** was the winner and donated back to the club.

### Director of Observing Report

**Juliana Grigorescu** was welcomed to the floor and opened the **Director of Observing Report** with the sky in March.

Looking South you can see the **winter constellations** advancing to the western sky. We are starting to lose the beautiful winter constellations. Observing slides shown of Sirius, the brightest star and other constellations advancing when pictures taken 5 minutes later. We are now starting to see **Spring constellations, Leo/Virgo.**

**Arcturus** is not a circumpolar star, **you can’t see it all the time.** To determine if a **star is circumpolar** — 90 (degrees) minus our latitude of 42 (degrees) therefore if the declination is **greater than 48 degrees** it never sets. Arcturus’ declination is 19 degrees.

**Uranus and Mars** are observed in the evening sky. **Jupiter, Saturn and Mercury** are observed in the morning sky. Mercury is seen moving from the western to eastern sky and **Venus is predawn.**

The **ecliptic is a line the planets follow.** If low in the morning it should be a little higher in the night sky. The Sun follows the ecliptic in the day time. The **celestial equator** runs east to west and is fixed in the night sky.

The **Vernal Equinox** occurs on **March 20th at 5:58 p.m.** where the number of daylight hours equals the number of night time hours.

The **Sun** has been rather **inactive** with one small sun spot. It is in its’ low cycle (minimum activity). The Sun follows an 11 year cycle.

The **moon** is in conjunction with **Saturn and Venus.** The **New Moon** is March 6th and **Full Moon** on March 21st.

**Recent Discovery by NASA—Earth and Venus** have collected co-orbiting