a second sheet which illustrated her explanation. On the other side of the sheet, she had placed information about how to estimate (measure) distances in the sky and she went on to give a brief explanation of this as well.

Juliana then went on with a slide presentation in which she pointed out a number of events that had happened earlier in the month including, the Quadrantid meteor shower, Earth reaching perihelion in early January, and the apparition and conjunction of **Mercury and Venus** very low in the darkening sky on January 10th. She showed images taken of the close pairing of planets by both Art Rae and Randy Groundwater (out at Hallam Observatory). She also spoke about the Sun being currently relatively quiet in its eruptive activity and gave a the audience a brief reminder of the coming phases of the moon. She then spoke about **Saturn** being now visible in the early morning sky in the Libra/ Scorpius region of the sky, just before sunrise. **Jupiter** was also highlighted as the most dominant planet visible in the sky as it is quickly approaching opposition and the planet is now lining up with Earth and the Sun in such a way that all the shadows of both the planet and its moons are falling directly behind these bodies from our vantage point. This is leading to some interesting visible phenomena in the coming weeks. First up, a **triple shadow transit** races across the cloud tops of the Jovian planet on January 23/24.

Juliana also came back to speak of comet Lovejoy, explaining a bit about its history and discoverer and describing its location in the sky, current position in its orbit in the inner solar system and that it will reach perihelion (closest point to the sun in its path) at the end of the month. She reminded photographers that an interesting view of a very young **crescent moon** will be visible low in the west on January 21st and that, from a dark location, the **zodiacal light** may be visible in the west in the early evening for a few weeks starting at the end of this month.

Finally, Juliana left us with images of optical weather effects shot by two of our members. First was a picture taken by **Dan Taylor of 'ice pillars'** taken from behind his home which occur when calm air and the presence of fine ice crystals can create vertical rising pillars above nearby light sources. Then the audience was treated to an image of a fine **sun pillar taken by Art Rae**.

At the end of Juliana's report, Randy closed the meeting by reminding everyone that our next monthly meeting would be on February 17th.

### Meeting adjourned at 9:50 PM.

Recorded by Steve Pellarin, RASC Windsor Centre Secretary.



The Royal Astronomical Society of Canada - Windsor Centre

# **Flver**

## **Next Meeting**

Tuesday, March 17, 2015
7:30 p.m.
at
Ojibway Park Nature Centre
5200 Matchette Road

Speaker: Randy Groundwater

**Topic: New Horizons Mission to Pluto** 

# **Upcoming Events**

*Moon, Mars and Venus Conjunction:* Just after sunset on Friday February 20th look for the Moon 1/2 degree away from Mars and 1 degree away from Venus. Venus and Mars are just 1/2 degree apart on the following night.

*Open House Night at Hallam:* The next open house night at Hallam is on Saturday February 21st at 7:00 p.m.. Come see Venus and Mars.

**Aldebaran:** As darkness falls on Wednesday February 25th look for Aldebaran less than 1/2 a degree from the Moon.

*Daylight Savings Time:* Begins at 2:00 a.m. on Sunday March 8th.

**Uranus:** Is 0.3 degrees from Venus on Wednesday March 4th and 0.5 degrees away from Mars on Tuesday March 10th.



#### Monthly Meeting Minutes January 20, 2015

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

Randy Groundwater, the Windsor Centre President chaired the meeting. Randy called the meeting to order at 7:33pm, welcoming all back from our brief winter break (there was no regular membership meeting in December).

Randy invited members present to review the minutes of November 18, 2014 regular membership meeting that were printed in the January Aurora newsletter and which was available to all attendees.

A motion to <u>accept the minutes</u> of the <u>November 18, 2014</u> meeting was made by Mario Fabris and seconded by Juliana Grigorescu. <u>Motion Carried</u>.

#### Main Presentation

Randy then introduced our main presentation for the night - a video documentary/homage by respected author and journalist Timothy Ferris to the field of amateur astronomy entitled, **Seeing in the Dark: How Amateur Astronomers Are Discovering the Wonders of the Universe**. Ferris is well-known for his popular books on astronomy, including, Galaxies, Coming of Age in the Milky Way and the Whole She-Bang, among others. He has also produced numerous astronomy-related documentaries, including PBS-produced, The Creation of the Universe.

Seeing in the Dark, is in a way Ferris' poetic love letter to the skies above and the hobby of amateur astronomy. Ferris' story invites us all to become stargazers. He recounts his own experiences as an enthralled lifelong amateur astronomer and reports from around the globe -- from England and Italy to the Florida Keys and the Chilean Andes -- on the revolution that's putting millions in touch with the night sky. In addition, Ferris offers an authoritative and engaging report on what's out there to be seen -- what Saturn, the Ring nebula, the Silver Coin galaxy, and the Virgo supercluster really are and how to find them. He visits with many notable amateur astronomers, including Robert Gendler, Jack Newton and Stephen James O'Meara, among others. In doing so, he notes the innovativeness and drive of those who have helped to keep the hobby on the cutting edge of technology and the discoveries/contributions of others who have helped keep amateur astronomers relevant in the growth of our knowledge of the universe. Ferris' ability to describe the wonders of the universe illustrate the passion and enthusiasm he has for the subject and make the video highly engaging for a wide audience.

#### Announcements

Randy announced that **Canada South Science City** was holding their monthly public speaker presentation at their building on Marion Road on Wednesday, January 22nd at 7:30pm.

Randy introduced longtime member **Mike Pataky**, who came up and presented two large beautiful framed **hi-resolution images of Jupiter** and some of the Galilean satellites which were being donated to the club for a raffle to raise money for our general operating fund. Preliminary thought is the draw will take place at our next monthly meeting in February.

Randy then asked the attending audience (~40 people) if there were any visitors or **new members attending the meeting**. When about 10 people raised their hands, Randy asked them to introduce themselves - which they all did.

Steve Mastellotto, our newsletter editor, then got up and spoke briefly about the book review he wrote (which was published in the January newsletter) about the book: *Cosmographics* .

#### **Meeting Break (15 minutes)**

50/50 Draw Winner: Al DesRosiers - \$6.50 donated back to club.

#### Other Announcements

- 1. Open House this coming Saturday (January 24th) 7:30 p.m. at Hallam Observatory. If cloudy, visitors are advised to postpone visit to the February date.
- 2. Dark Sky Night at Point Pelee National Park This month is a non-club sponsored night. Check Point Pelee website or call the park for more info.

Director of Observing Report, Juliana Grigorescu: Juliana began her report by speaking briefly about Comet Lovejoy C/2014 Q2 which was enjoying a very good apparition this month, peaking near 4th magnitude at the present although a bright moon is currently interfering somewhat with observations. The comet is currently passing through the constellation Aries and will be moving first into Triangulum, then Andromeda in the coming 10 days or so. The comet's green color comes from molecules of diatomic carbon that are fluorescing brightly in that colour under the constant bombardment of ultraviolet rays coming from the sun. Expectations are that the comet should continue to be visible to the naked eye well into the middle of February.

Juliana then reviewed the **monthly sky map** which she had handed out to the audience and spoke about the charts and data on the back and how to use them. She also spoke about why we see certain constellations in the night sky at certain times of year and at different times of night and handed out to the audience