

**Public Education Director, Randy Groundwater:** reported he had a successful session at Hallam Observatory with 35 participants from the Emeryville Cub Scouts group.

**Public Relations Director, Peter Bondy:** announced the preparation of an upcoming display for Earth Day and that the Trillium Foundation request list is to be compiled and rated for Council.

**National Council Representative, Mike Mastronardi:** reported that he will be attending the upcoming National Council meeting in Toronto on March 27<sup>th</sup>. He reported that the biggest issue this year is a \$6 dues increase that will be voted on at the AGM. The extra funds will be put toward more youth programs for each Centre and a national full time director.

**Observatory Director, Dave Panton:** see the report in the March 2010 edition of Aurora.

**Membership Director, Tina Chichkan:** No report.

**Light Pollution Abatement Director, Dan Taylor:** reminder that his report is available to read on the Centre's website.

Steve Pellarin informed the membership that we will be hosting a **public observing night** on Saturday April 17<sup>th</sup> at the West Gate of Malden Park on Matchette Road in Windsor. He requests help from members that can assist with telescopes and or be there to help. Steve noted that this event is happening the same night as the monthly Hallam Observatory Open House.

**Director of Observing Report, Juliana Grigorescu:** Juliana started the session by asking members what they had been observing this month. Members reported viewing Mars and Venus.

At this time the ecliptic is due east-west and perpendicular to the horizon as we approach the Spring Equinox. Spring/summer constellations are coming into view. The "pivot of the Milky Way", Cassiopeia, tells us what season. It looks away from the centre of the Milky Way in winter but looks toward it in summer.

For children to tell the difference between a planet and a star remember that a planet is "a star that does not twinkle".

The Vernal Equinox happens this year on March 20<sup>th</sup> at 1:32pm EDT.

**The Sun:** Still not very active coming out of the bottom of its activity cycle. On March 11-13 a line of comets plunged into the Sun.

**Planets:** Saturn will be in opposition on March 21. Asteroid VESTA is in Leo near Mars at magnitude 6.5.

**Stars:** a white dwarf in Eridanus is visible. Near the orange coloured Omicron 2 is a 9<sup>th</sup> magnitude companion white dwarf.

**Clusters:** M41 is a cluster of red giants.

**Nebulae:** Eskimo Nebula in Gemini, NGC 2392 and nearby NGC 2420. In the Virgo cluster look for M87, an elliptical galaxy that has been reported to have a black hole.

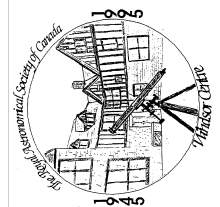
At the conclusion of her report Juliana requested that any astronomical pictures you take we would love to include them in our monthly sky reports.

President Paul Pratt thanked everyone for their reports and the membership for attending and **adjourned the meeting at 10:10 p.m.**

Minutes recorded by Art Rae



# Aurora



Volume 35, No. 7

The Royal Astronomical Society of Canada - Windsor Centre

April 2010

## Flyer

### Next Meeting

Tuesday, May 18, 2010  
7:30 p.m.

at

Maidstone K of C Hall  
10720 County Road 34

Speaker: Dr. William Baylis

Topic: "*William Herschel*"

### Upcoming Events

**Earth Day:** We will be celebrating Earth Day on Sunday April 25, 2010 from 10:00 a.m. - 3:00 p.m. at Mic Mac Park.

**Science Rendezvous:** The RASC Windsor Centre will be participating in the Science Rendezvous at the University of Windsor on Saturday May 8. We will be doing Solar Observing along the riverfront from 10:00 a.m. - 4:00 p.m. and we will be holding a special open house night at Hallam Observatory from 8:30 - 10:00 p.m.

**Open House Night at Hallam:** The next open house night at Hallam Observatory is on Saturday May 22nd at 9:30 p.m..

**Annual Picnic:** Will be held at Hallam Observatory on Saturday June 12, 2010.

## Monthly Meeting Minutes

### March 16, 2010

The Royal Astronomical Society of Canada Windsor Centre, Maidstone Recreation Centre.

The meeting was chaired by the President Paul Pratt. Paul welcomed members and guests to commence the meeting at 7:30 pm.

Paul asked for a motion to accept the minutes of the February meeting as presented in the Aurora. Motion to accept by Randy Groundwater, seconded by Steve Pellarin. Motion CARRIED.

Paul introduced the first presentation:

#### First Talk: “Telescope Basics” by Peter Bondy and Steve Mastellotto

Steve Mastellotto took the audience through terms and definitions of telescope components in his presentation that, as he said, “We need to get back to basics” as not everyone joining our Society has the knowledge of astronomical telescope types and their special construction.

With graphic illustrations Steve showed the three major types of instruments including the refractor or lens telescope, reflector or mirror one and catadioptric, a combination lens-mirror machine and explained how each type works. Telescope sizes are considered small if the main (objective) mirror is less than 8” in diameter, medium if 8” to 12” diameter and large if greater than 12”. Refractor sizes are small at less than 4”, medium at 4-6” and large at 6” and greater. He then described many of the terms and formulas used to specify an instrument.

Steve then introduced various defining formulas used to categorize telescopes and their performance including focal length, magnifying power and usable magnification. He then defined the basics of eyepiece selection including focal length, apparent field of view and eye relief. Steve finished up taking questions from the audience including “What are the advantages of different focal lengths and trade-offs”. He finished with a magnification rule of thumb of 50x per inch of main lens or mirror aperture (Steve said, “X means number of times magnification”).

During the presentation Steve referred to the various components of the hand made 6” portable reflector telescope that Peter Bondy had brought and set up for display. At the break Peter demonstrated the components up close for members that needed more details of the parts of the instrument.

President Paul thanked both Steve and Peter for their presentation.

#### Second Talk: “Charles Messier – a biography” by Paul Pratt

One of the most well known lists of astronomical objects was created by a French astronomer, Charles Messier, after his interest in comets found him observing comet-like objects that did not move through the sky as comets did. Although he did not know at the time what these fuzzy objects were, he logged them so he would not be again fooled into thinking he had found another comet. Turns out these objects were later to be seen as galaxies and star clouds far out in space away from our own galaxy.

Messier got inspired in astronomy when at the age of 13 years observed the great comet of 1744. The 1748 annular eclipse of the sun further developed his interest. After an accident injury his brother found him a job with the Naval Astronomer’s Office. In 1758 while

searching for a returning comet found another nebulous object that was not a comet. He cataloged the object as M1. He kept finding more of these fuzzy objects and his first list included 45 of them. He published this catalog in 1784.

The instrument that Messier used to search for comets was either a 6” reflector or 3.5” refractor telescope. Using these scopes Messier and his assistant found 29 of the 45 comets discovered in the period of his observing life.

Charles Messier continued to find more nebulous objects over his lifetime until the list grew to the one we refer to today at 110 items. Messier lived to 87 years and was recognized science groups and academics.

Paul then described an annual contest that many amateur astronomers enter called the Messier Marathon, the object to view all 110 Messier objects in one night. This is possible in March as the opportunity to see them all is better than any other period in the year. All of them are very difficult to see at this latitude but local observers at the Hallam Observatory have seen as many as 106 of the Messier “fuzzies”. Paul followed up with a discussion with the audience on some of the subtleties of what Messier found.

Before the Break, President Paul reminded members to continue to give Al DesRosiers **Canadian Tire money** for repairs to Hallam Observatory.

Tom Sobocan asked for assistance in preparing the coffee and beverages for the Break Period for the times he is not able to attend.

**Break and 50/50 Draw:** The winning ticket was won by Mehmet, one of our new members, who kindly donated it back to the Centre.

Four first-timers were introduced and welcomed to the meeting of the Windsor Centre by President Paul Pratt.

#### Announcements

Al DesRosiers has again volunteered to run a **yard sale** fundraiser for the Windsor Centre this year. We will have a fall yard sale and asked if the members would hold items and set them aside for the sale this next few months up until September. Members thanked Al for taking on this project one more time.

Dan Taylor will be attending **Enviro Expo** in Windsor April 15 – 18<sup>th</sup>.

International Astronomy Day will be observed by the Centre on **Earth Day** with displays and telescopes at MicMac Park on April 25<sup>th</sup>.

The **Windsor Science Centre** will celebrate Earth Day with a dinner on April 22<sup>nd</sup>. Tickets are available.

#### Reports

**Treasurer, Greg Mockler:** reported a bank balance of approximately \$5,500 and 104 paid up members.

**Librarian, Rick Marion:** no report

**Newsletter Editor, Steve Mastellotto:** as always requested articles.