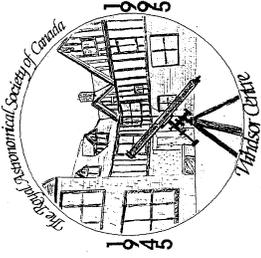




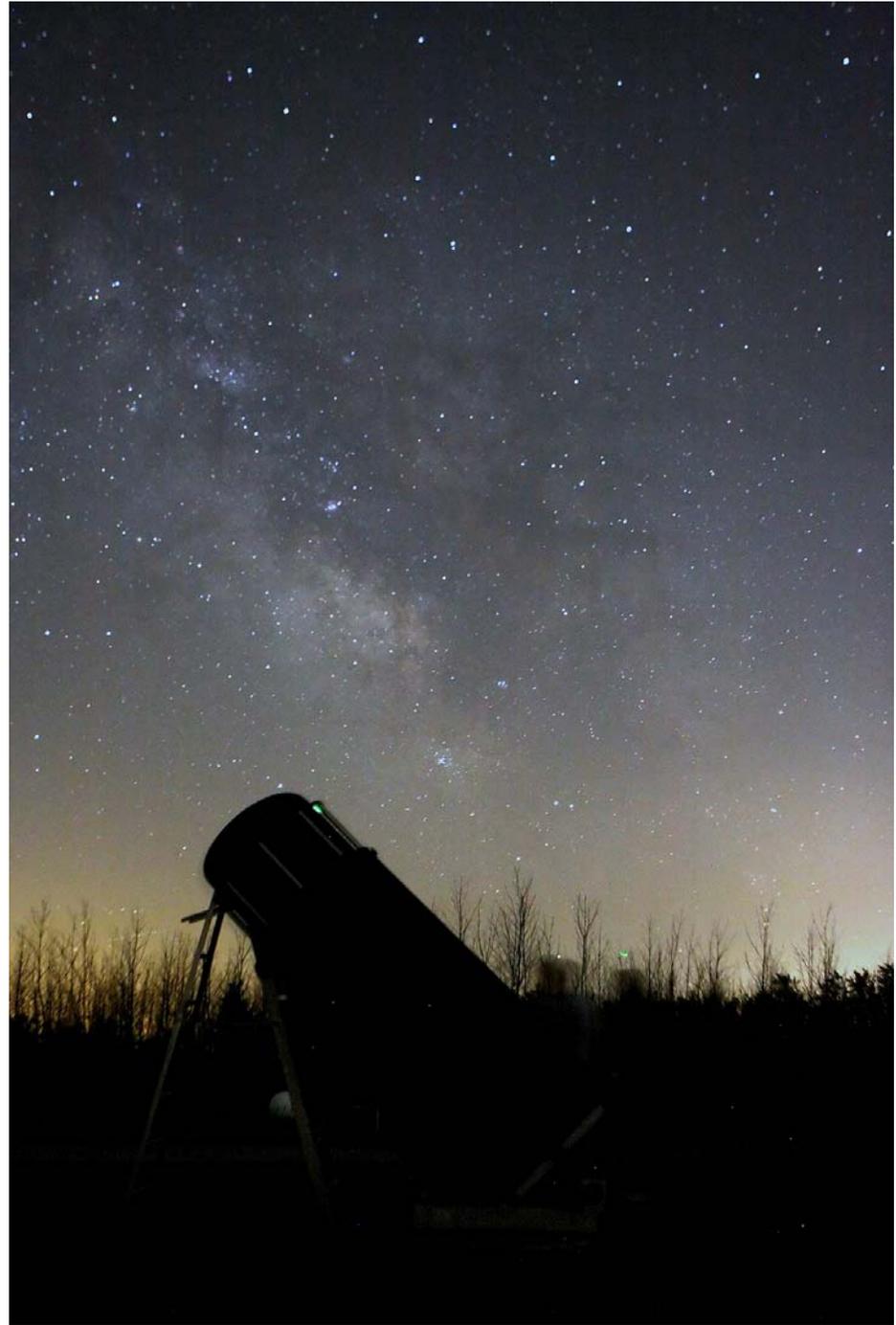
# AURORA



October 2010

The Royal Astronomical Society of Canada - Windsor Centre

Volume 36, No. 2



The Summer Milky Way from Hallam Observatory and the Leviathan of Lasalle (Steve Pellarin's telescope) *Photo by Rick Marion.*

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## Calendar of Events

### Our next meeting...

Tuesday November 16, 2010

7:30 p.m.

at

Maidstone K of C Hall

10720 County Road 34 (Old Highway #3)

### Main Speaker...

Paul Gray, RASC - New Brunswick Centre

### Topic...

“Supernova Search Program”

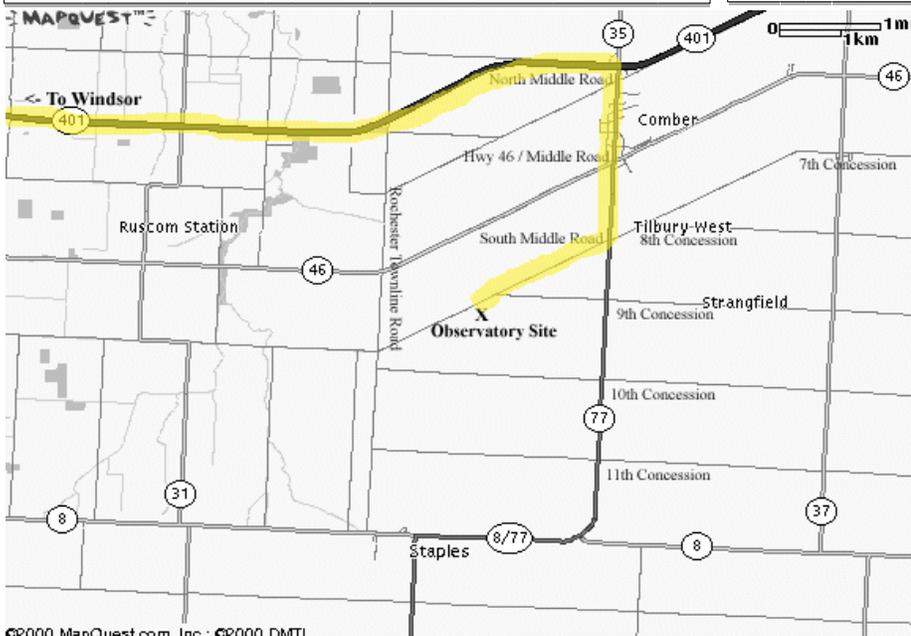
### Activities...

**Jupiter Double Shadow Transit:** On Sunday October 31st from 12:15 a.m. - 3:00 a.m. (Saturday night) look for the shadows of Europa and Ganymede crossing Jupiter's disk.

**Daylight Savings Time:** Ends on Sunday November 7th. Set your clocks back 1 hour.

**Open House Night at Hallam:** Saturday November 13th starting at 7:00 p.m..

**Leonid Meteor Shower:** No it won't be like a few years back when we saw hundreds of meteors every hour and the nearly full moon interferes this year. But there is always something about seeing a Leonid meteor. If it is clear head out to Hallam following our meeting on the 16th because the Leonids peak on Wednesday November 17th this year.



### Hallam Observatory Site

**Directions:** The map above shows the Comber area and it includes the major highways (401, 77, 8 and 46) that are in the area of the observatory.

The most direct route from Windsor is "highlighted" on the map which is to take Highway 401 East to Highway 77 South to South Middle Road. Turn right onto South Middle Road and go about 1 kilometer and just after the point where Concession 9 joins it (it is hard to see this intersection) you will find the observatory site on the South side (left) of the road.

If you hit the Rochester Townline Road (you come to a stop sign) you have gone too far.

## Submissions

Aurora is published monthly except for July, August and December. The September, October, January, March and May issues are full newsletters (usually 6 pages) with a number of member submitted articles. The November, February, April and June issues are short flyers (2 pages).

Submitted articles can be of any length from a paragraph to multiple pages. I can scan pictures and/or diagrams (both prints and film) to support your article and the originals will be returned to you.

Submission deadline is the 1st of the month.

Editor: Steve Mastellotto Email: mmastellotto@cogeco.ca

## Membership

The Windsor Centre of The Royal Astronomical Society of Canada meets on the 3rd Tuesday of every month (except July and August) at the K of C Maidstone Recreation Centre. In addition to regular meetings the centre hosts a number of observing nights, a picnic and a December social. Members receive a copy of the Observer's Handbook, a subscription to SkyNews magazine and access to the Centre's library and telescopes. And optionally the RASC Journal in print form—online version free.

Annual Membership Fees: Please see the RASC website at [www.rasc.ca](http://www.rasc.ca) for current rates.

Contact Greg Mockler at (519) 326-7255 or visit our website at <http://www.rascwindsor.com> for more information.

## September 2010 Meeting Minutes by Dave Panton

Minutes from the meeting of September 21, 2010 at the Maidstone Recreation Centre.

The meeting was chaired by President Paul Pratt. Paul welcomed members and guests. Then a vital item needed attention. Tom Sobocan is teaching night classes this Fall and the important task of managing coffee break requires an individual to volunteer for the job during this period. John Marn cheerfully took on the task.

Paul mentioned that the previous Saturday night featured our joint astronomy and wine tasting event at the Aleksander Estate Winery near Ruthven. Paul reported a near sellout of 61 paid guests, and an enjoyable evening in spite of a sky that only cleared a little very late.

Paul introduced our main speaker, past president Dr. Pierre Boulos

### Astronomy in Our Daily Lives by Pierre Boulos

Pierre spent a lot of research time to find astronomical names used in marketing all manner of manufactured items. Many required long memories of older members Ford Mercury and Meteor automobiles. Saturn cars look like they are history too. Knowledge of kitchen cleaning supplies like Comet Cleanser and Sunlight Soap also qualified. A surprise came in the well recognized name "Subaru" and their seven star logo taken from the Pleiades which also translates into Subaru. Food such as Mars Bars and Milky Way candy bars also fit. Then there are (or were) Zenith radios and television sets.

Pierre asked for ideas from his audience. Among them was recalling long term member Robin Smallwood operated his Universal Science store and drove an Astro van. Pierre had a shot taken at Stellafane showing a huge 32 inch Dobsonian telescope that could be knocked down and transported in an Astro van.

Paul thanked Pierre for his unusual and inspired presentation.

Coffee break was coming in about ten minutes. Steve Pellarin filled the time with a brief presentation on his recent visit to the Large Hadron Collider shared across the French/Swiss border near Geneva. He also had the opportunity to visit the home of Albert Einstein when he lived in that city as a young man and produced his most important work.

**Coffee Break** gave all a few minutes to socialize before the 50/50 draw was held and the meeting resumed.

### Reports

**President, Paul Pratt:** Paul described the very successful event held on Saturday at the Aleksander Estate Winery and thanked all who participated. Had the sky been clear the affair would have been perfect. The large buffet and desert table was a pleasant surprise to all and greatly appreciated by everyone. Paul reported we were given a \$500 cheque for our part in the event.

Paul asked for a motion to **accept the minutes** from the June meeting, Peter Bondy moved and Brian Thomas seconded the motion which carried.

**Secretary, Dave Panton:** The minutes are in order so there is nothing to report.

**Treasurer, Greg Mockler:** Greg reported our current bank balance is \$6,520 including the \$500 winery cheque deposit. Greg is taking orders for the annual RASC calendars.

**Librarian, Rick Marion:** No report.

**Newsletter Editor, Steve Mastellotto:** The September Aurora printed in black and white does not do justice to member's photographs. The issue is online and in full color so please take a look.

**Public Education, Randy Groundwater:** Randy has a talk and visit to Hallam set for Monday night by a group of Rotarians from Leamington.

**Public Relations, Peter Bondy:** Peter requested gift donations for door prizes (suitably wrapped) for our Christmas Social.

**Garage Sale, Al DesRosiers:** Al is holding his third annual garage sale in aid of raising funds for RASC Windsor and asked for donations of all kinds. Large items are acceptable as Al can pick them up in his trailer. A few items have been pre-sold and lots more are needed. The event will be held Saturday October 2nd starting at 8:00 a.m. and will finish at 4:00 p.m. Helpers are needed especially in the morning to set up.

**Light Pollution Abatement, Dan Taylor:** Dan reported an issue regarding lighting at the new roundabout has been resolved. There is however, another pending near Comber where a new truck marshaling yard is to be built. See the RASC Windsor Centre website for the latest developments.

**National Council Representative, Mike Mastronardi:** Mike follows National affairs on the internet, not being able to get away from his work to attend the Annual General Assembly this year. There are no items of concern to Windsor Centre at this time.

**Observatory Director, Dave Panton:** The computer/telescope system has performed very well all Summer but chose to be recalcitrant on September 17th, losing the internal time connection between telescope mount and computer. The issue has been resolved, proven to be OK, saved and proven to work again on September 20th. It does not involve the old vs. new gap between old and new daylight savings time rules. Ken Garber suggested a "patch" be installed in the computer to update it to the new DST change dates.

Key access to the observatory, noted Steve Mastellotto, is for those who have current memberships and paid up annual key

(Continued on page 5)

## Einstein@Home Project

Dave Mailloux participates in this project and brought it to my attention when he received the email at the end of the article.

**What is it?** From their website - Einstein@Home is a program that uses your computer's idle time to search for gravitational waves from spinning neutron stars (also called pulsars) using data from the LIGO gravitational wave detector.

Einstein@Home also searches for radio pulsars in binary systems, using data from the Arecibo Observatory in Puerto Rico.

Einstein@Home is a World Year of Physics 2005 and an International Year of Astronomy 2009 project supported by the American Physical Society (APS) and by a number of international organizations.

If you would like to take part, go to their home page (<http://einstein.phys.uwm.edu/>) and follow the "Join Einstein@Home" instructions on the left. Einstein@Home is available for Windows, Linux and Macintosh OS X computers.

Einstein@Home is now carrying out a search of data from LIGO's first science run at design sensitivity (S5). The current analysis (S5GC1) uses 8898.5 hours of data from the entire S5 run. S5GC1 is the first analysis deploying the F-statistic plus global-correlations method, which is currently the most sensitive search technology known.

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Here is the email Dave received...

Dear Einstein@Home volunteer,

I want to share some good news with you.

For more than a year, Einstein@Home has been using about one-third of the available computer time to search for radio pulsars in data from the Arecibo Observatory. I'm happy to report that we found our first radio pulsar last month: PSR J2007+2722.

It is still not sure, but this appears to be a rare type of object called a Disrupted Recycled Pulsar. The discovery was published on-line by the journal Science, on Thursday August 12th.

Congratulations to our volunteers Chris and Helen Colvin (Ames, Iowa, USA) and Daniel Gebhardt (Universitaet Mainz, Musikinformatik, German), whose computers discovered the pulsar with the highest significance!

Further details of this first Einstein@Home discovery may be found in the main news item posted on the Einstein@Home web site, at <http://einstein.phys.uwm.edu/>. You can also use Google News and similar searches, with keywords like 'pulsar' or 'J2007+2722'

or 'Einstein@Home' to find recent news articles about the discovery, in English, German, French, Spanish, Russian and other languages.

So far, Einstein@Home has only analyzed about half of the Arecibo data set. Due to improvements in the instrumentation, the more recent data is better-quality than the older data, so I am sure there are other interesting objects to be discovered!

## Proposed 2011 Council of the RASC - Windsor Centre

### Elected Officers

President	Paul Pratt
1st Vice-President	Peter Bondy
2nd Vice-President	Sue Iihola
Secretary	<i>Open Position</i>
Treasurer	Greg Mockler
National Council Rep.	Mike Mastronardi

### Councilors

Tina Chichkan	Randy Groundwater
Steve Mastellotto	Steve Pellarin
Paul Preney	Donna Ronconi
Susan Sawyer-Beaulieu	Brian Thomas
C. Joady Ulrich	

### Appointed Officers

Honorary President	Dr. William Baylis
Past-President	Dr. Pierre Boulos
Librarian	Rick Marion
Recording Secretary	<i>Open Position</i>
Public Education Director	Randy Groundwater
Public Relations Director	Sue Iihola
Directors of Observing	Steve Pellarin
	Juliana Grigorescu
Light Pollution Abatement Dir.	Dan Taylor
Hallam Observatory Director	Dave Panton
Aurora Editor	Steve Mastellotto
Webmaster	Steve Mastellotto

## September 2010 Meeting Minutes (continued from page 3)

fees. Keys should be returned if this is not the case.

**Summer Observation Reports from Hallam.** The Perseid meteor shower observed from our observatory was a disappointment in the numbers of meteors but at times there were real show stoppers. One was bright enough to be considered a fireball as reported by Brian Thomas on site at the time. Brian shot some nice stills of the observatory with Scorpius in the background and another showing a nice big section of our home galaxy.

**Director of Observing, Juliana Grigorescu:** The September sky, Juliana pointed out has many interesting features. It features the time of year when an East-West road would see the Sun rise on it's centreline in the East and set on the West at Fall Equinox. The invisible ecliptic (path of the planets) also crosses both ends of the road at this date. Night and day are equally long (other than horizon sky glow). For those in dark sites with a clear view to the East may see Zodiacal light in the sky before Sunrise.

She asked others for reports of their observing experiences from other locations. Mike Mastronardi on a boat out in Lake Nipissing at night saw a sky filled with so many bright stars it was difficult to identify Cygnus or even easily recognized Ursa Major. Tina reported seeing Jupiter's great red spot from one of the telescopes set up at the Aleksander Estate Winery Event.

After handing out the monthly sky charts for September Juliana listed lots of interesting objects visible naked eye, with binoculars and telescopes. Jupiter is very bright, Venus also on the

23rd and Mercury visible in the low morning sky. Uranus is near Jupiter for several days and in a wide field view can be seen together.

In Pegasus Messier object 15 is a great globular in a telescope due to the bright spots in it's center. Other objects like Stephan's Quintet and NGC 7331 the Deer Lick group are nice sights. Lyra is a great sight overhead with it's Ring Nebula and double double stars Epsilon 1 and 2.

Comet Hartley is in our night sky, barely visible in the C14 at Hallam it has been captured in the AT111 by using multiple exposures and stacking them to show the comet's motion over hour long periods. Juliana showed such a photo shot by a member at Hallam.

New camera focus devices called Bahtinov masks were made for both telescopes and make the vital task of focusing to take good astroimages a little easier and produce a very spectacular image on the camera view screen when focus is "dead on". They were a key part of taking good Comet Hartley images for processing.

From Space News, Juliana mentioned NASA's "Discovery Mission" will deliver the first human like robot to the space station. We have all lost "Star Hustler" Jack Horkheimer in his recent passing. The popular PBS TV series of shorts will not die with him and a new person will carry on the tradition.

Paul thanked Juliana and **adjourned the meeting** shortly after 10:00 p.m..



The photo above is a correction for the one posted last month. This is the 2010 RASC - Windsor Centre Summer picnic group photo. *Photo by Steve Mastellotto.*

## RASC Windsor Centre and Aleksander Estate Winery Event



On Saturday September 18th the RASC Windsor Centre and Aleksander Estate Winery held a fundraising event. Despite the mostly cloudy weather everyone had a great time sampling the wine, a buffet dinner and a great talk by Randy Groundwater.