

SKYNEWS



ROSETTE NEBULA (NGC 6888)
By W. John McDonald

IN THIS ISSUE

On the Cover
May Speaker
President's/Council Reports
The Hottest Planet!

MEETING

Weds. May 14, 2014, 7:30 PM
University of Victoria
A104, Bob Wright Bldg.
3800 Finnerty Road

On The Cover

Rosette in H-Alpha. Reprocessed image of the Rosette Nebula in H-Alpha from my backyard in Victoria, taken on December 24, 2009. The Rosette Nebula is a large circular H II region located near one end of a giant molecular cloud in the Monoceros region of the Milky Way Galaxy. The open cluster NGC 2244 is closely associated with the nebulosity, the stars of the cluster having been formed from the nebula's matter.

Equipment: 105mm WO Refractor with modified Canon T1i on HEQ5 mount.

Conditions: Clear and cold (1 degree C)

Exposures: 55 light and 20 dark at ISO 3200 for 120 seconds each with 8 flats for calibration.

Processing: ImagesPlus and Photoshop.

May Speaker

Our monthly meeting will be held on Wednesday, May 14th in Room A104 of the Bob Wright Centre, University of Victoria, at 7:30 PM.

Our speaker will be Dr. Michele Bannister, a postdoctoral fellow at NRC and UVic.

The title of Michele's talk is: Mapping the Deep: The past and future promise of searches for trans-Neptunian worlds. <http://victoria.rasc.ca/mapping-trans-neptunian-worlds/>

Please join us for coffee and cookies in the Astronomy Lounge after the lecture, located on the fourth floor of the Elliott Building.

President's Report

This month brings with it, in addition to preparations for the GA 2014, which are proceeding nicely, a very successful International Astronomy Day (IAD). This yearly event was held, for the first time since 2000, at the Royal BC Museum in downtown Victoria.

The event, thanks to the usual efforts of Sid, Lauri, and Sherry in organizing it, and a huge cast of enthusiastic volunteers in putting it on, came off without a hitch. The museum staff, led by Leslie Johnson, could not have been more helpful.

Sid, counting at the main entrance to our hall, registered over seven hundred visitors, who were treated to most of the usual displays; telescopes (large and small), a kid's table, Bruno's Planetarium, and a special treat, as it turned out, the Centre's one-hundred thirty year-old brass telescope, made, except for the lens, in Toronto, and used in serious astronomy until at least the late 1940's (one can barely imagine how – but the fact that it was writes volumes about the patience of the astronomers who used it). The scope was proudly situated on its vintage clock-driven mount, and tenderly looked after by Michael Wheatley. Sid and his crew of assistants brought the several hundred pounds of it from its home in the

now-closed Center of the Universe on Observatory Hill. There with us at the Museum were representatives from Science Ventures at UVic, from Pearson College, from NRC, and from the University of Victoria Astronomy Department.

The day's festivities were topped off with what was hoped would be "public night sky viewing" on top of said Observatory Hill, an event carefully planned by Lauri, and Jim Hesser, along with Greg Fahlman (NRC Manager) and his staff, including Kevin Farris and Clyde Donnelly, plus Dave Balam and Dave Bohlender, plus (again) Rita Mann and Michele Bannister. The two Daves were to operate the Plaskett Telescope, which was made available for public tours. Rita and Michele, both Post-doctoral fellows at the Herzberg Institute of Astrophysics, were to, and did, give public talks at the CU, which was opened for the evening. Victoria Center volunteers were to lead tours of the CU and set up telescopes in the parking lot.

In spite of the usual clouds and sprinkling rain, this portion of the IAD celebration was also a great success. Over two hundred public members were in attendance, this in spite of the weather. The two lectures and the tours of the Plaskett were big hits. Even the exhibits inside the CU were well-visited. As most of us know, we have submitted a proposal to NRC that we be allowed to host public openings at the DAO and its environs for several weekends in July and August. This May evening was a bit of a "dry run" for those events. We certainly hope that the success of this event will hold us in good stead with respect to the later openings.

Happy viewing, all

....*Nelson Walker*

Membership Report – May, 2014

Membership Activity

New and Returning: 4
Renewed: 5
Grace Period: 11
Total Membership: 187

Liaisons

HIA: Nothing to report

Transport Canada: Nothing to report

U-Vic: Nothing to report. U-Vic observing sessions are still tentatively scheduled. Watch for Active Observers' E-mail reports.

There has been lots of interest in joining the RASC by people at Astronomy Day, and via E-mail and phone. I hope they'll follow through and join us!

....*Sherry Buttnor*

2014 Telescope Raffle Draw

For the past few years the Victoria Centre has been holding telescope draws to raise funds for its Public Outreach Activities. It has been a successful enterprise in more than one way; raising funds for a worthy project and getting the membership involved in a common cause.

This year's draw prize was a Meade's LX90. The tickets for this year's raffle draw were first offered on January 31st at the Hobby Show and concluded on the evening of May 3rd at the CU. A very significant number of tickets were also sold with the help of our members. Thanks to everyone for your help.

In any such draw, normally there is one proclaimed winner, however in this case everyone wins as the funds raised are used for the common good.

This year the draw was held at the RBCM at 4:00pm on May 10th. The winning ticket number is 159. The prized telescope will be awarded to the winning ticket holder at the regular monthly meeting on Wednesday May 14.

....*Sid Sidhu*

Your Editor's Musings

There was a sad start to my family's New Year. My brother, Rick Bell, died suddenly of a heart attack after New Year's Day. As we came together to plan his memorial, to grieve, and to share the stories and memories of his life, I recalled one last conversation I had with him....

At one of our family dinners during the Christmas holidays, Rick asked about the Centre of the Universe. He saw an article in the Saanich News about a possible re-opening in the following Spring. He wanted to come up to see some of the displays and to look through a telescope or two. We made a tentative date to go up together, dependent on the time and nature of the Centre's re-opening.

Fast forward to Saturday, May 3rd. Our members and the public enjoyed the activities of a successful International Astronomy Day at the Royal BC Museum. The decision was made for a "dry run" re-opening of the CU that night as well. A good number of volunteers, including yours truly, made our way up to the Hill for the evening's activities. Although the skies were overcast with some drizzly rain, it didn't dampen the spirits of the more than 200 visitors who made their way up the Hill for the evening events. I missed my brother that night but the enthusiasm of the many visitors, young and old, made my heart and spirit joyful. A time to celebrate Rick's life – and a possible new beginning for the Centre of the Universe. He would have been very pleased – indeed.

Clear Skies, Bro. Clear Skies, everyone....

....*Diane*

The Hottest Planet in the Solar System

By Dr. Ethan Siegel

When you think about the four rocky planets in our Solar System—Mercury, Venus, Earth and Mars—you probably think about them in that exact order: sorted by their distance from the Sun. It wouldn't surprise you all that much to learn that the surface of Mercury reaches daytime temperatures of up to 800 °F (430 °C), while the surface of Mars never gets hotter than 70 °F (20 °C) during summer at the equator. On both of these worlds, however, temperatures plummet rapidly during the night; Mercury reaches lows of -280 °F (-173 °C) while Mars, despite having a day comparable to Earth's in length, will have a summer's night at the equator freeze to temperatures of -100 °F (-73 °C).

Those temperature extremes from day-to-night don't happen so severely here on Earth, thanks to our atmosphere that's some 140 times thicker than that of Mars. Our average surface temperature is 57 °F (14 °C), and day-to-night temperature swings are only tens of degrees. But if our world were completely airless, like Mercury, we'd have day-to-night temperature swings that were *hundreds* of degrees. Additionally, our average surface temperature would be significantly colder, at around 0 °F (-18 °C), as our atmosphere functions like a blanket: trapping a portion of the heat radiated by our planet and making the entire atmosphere more uniform in temperature.

But it's the *second* planet from the Sun -- Venus -- that puts the rest of the rocky planets' atmospheres to shame. With an atmosphere **93 times as thick as Earth's**, made up almost entirely of carbon dioxide, Venus is the ultimate planetary greenhouse, letting sunlight in but hanging onto that heat with incredible effectiveness. Despite being nearly twice as far away from the Sun as Mercury, and hence only receiving 29% the sunlight-per-unit-area, the surface of Venus is a toasty 864 °F (462 °C), with *no difference* between day-and-night temperatures! Even though Venus takes hundreds of Earth days to rotate, its winds circumnavigate the entire planet every four days (with speeds of 220 mph / 360 kph), making day-and-night temperature differences irrelevant.

Catch the hottest planet in our Solar System all spring-and-summer long in the pre-dawn skies, as it waxes towards its full phase, moving away from the Earth and towards the opposite side of the Sun, which it will finally slip behind in November. A little atmospheric greenhouse effect seems to be exactly what we need here on Earth, but as much as Venus? No thanks!

Check out these “10 Need-to-Know Things About Venus”:

<http://solarsystem.nasa.gov/planets/profile.cfm?Object=Venus>.

Kids can learn more about the crazy weather on Venus and other places in the Solar System at NASA's Space Place: <http://spaceplace.nasa.gov/planet-weather>.

Swap and Shop

From time to time, we get requests from our members to post astronomy items for sale or trade. If you have anything to post, please let your Editor know. I will be happy to include them in the Skynews newsletter.

Items for Sale – Percy Crosthwaite

06/02/2009 No. 6011

1-EN5-20/0 Eyepiece 20.0 mm Nagler Type 5	\$539.95
1-EN4-12/0 “ 12.0 mm “ Type 4	\$429.95
PMt – 2200 Powermate 2.0x	\$359.95
Green Laser Pointer	\$ 99.95
2ND13 2” Density Filter	\$ 29.95

29/07/2009 # 6631

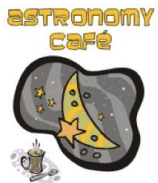
11069 Nextstar 8 SE Celestron	\$1349.95
18774 Power Tank 7 AH-12V	\$ 74.95
04200 FlexShield	\$ 39.95
07722 Solar Filter	\$139.95
93527 Diagonal 2” XLT-SCT	\$169.95
LC Laser Collimator w/sideview	\$ 49.95
15188 Scope Cloak	\$ 79.95
(#7675)	
07227 EZ Finder	\$ 69.95
FURB Red Dot Finder	\$ 9.95
(#7056)	
92110 Observing Chair (Not used)	\$129.95
(#13756)	
94005 Celestron StarSense	\$349.95

Percy Crosthwaite is asking \$2300.00, if you wish to purchase the entire package. Give Percy a call at 250-594-5858, if you’re interested in the above items.

Council for 2013 / 2014

Past President: Lauri Roche pastpres@victoria.rasc.ca
President: Nelson Walker president@victoria.rasc.ca
First Vice President: Charles Banville vp@victoria.rasc.ca
Second Vice President: Sherry Buttner vp2@victoria.rasc.ca
Treasurer: Bruce Lane treasurer@victoria.rasc.ca
Secretary / Recorder: Deb Crawford secretary@victoria.rasc.ca
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New Member Liaison: Sherry Buttner NewMembers@victoria.rasc.ca
Membership Coordinator: Sherry Buttner Membership@victoria.rasc.ca
Observing Chairperson: Bill Weir obschair@victoria.rasc.ca

Members at Large: Bill Almond, Jim Hesser, Alex Schmid, David Lee, Li-Ann Skibo, Paul Schumacher, Matt Watson



Astronomy Café: Held every Monday at Fairfield Community Centre - 1330 Fairfield Rd, Victoria, at 7:30pm to 10pm. **Please note that May 26th is the last meeting before Astronomy Café takes a break over the summer months.** Call Malcolm at (778) 430-4136 for directions and information. Newcomers are especially encouraged.



New Observers Group: Hosted by Sid Sidhu, 1642 Davies Road, Highlands. Please call (250) 391-0540 for information and directions.



Email Lists Observer / CU Volunteers / Members
Contact Matt Watson to subscribe. <mailto:admin@victoria.rasc.ca>

Next month's meeting is Wednesday, June 11th, 2014, at 7:30 PM.