Skynews





http://victoria.rasc.ca/

This Month

Pal Virag — December 14, Elliot Building, Room 167 Mars

Being the most earth-like yet truly alien outer world, the Red Planet has received the deepest attention of scientists and fans of the science-fiction genre alike. In addition to the TAE Project's trademark dome screen -- utilized for presenting global images of Mars [and other planets] in three-dimension --, tonight's presentation, 'Expedition Mars - A 3D Adventure', also features captivating 3D images projected on to a traditional flat screen. (Looking at these digitally enhanced and colorized stereo pictures thought red-blue anaglyph glasses, the viewers may feel as if they were standing on the Red Planet or hovering above intriguing Martian landscapes.)

Bio

Pal came to Canada from Hungary twelve years ago, where he was an architectural engineer and technical teacher. As an educator and inventor, he has been searching for new avenues to present space exploration in innovative ways. For providing the public - particularly the youth - with up-to-date information on astronomy and space exploration, he has developed a unique, artistic science outreach program, the Travelling Astronomical Education [TAE] Project (www3.telus.net/taeproject), in 1995. (Completed with recorded narration, music and sound effects, hundreds of astronomy and custom-made space artike images are projected through a cluster of visual projectors onto two screens during each multimedia presentation.) Pal has been touring schools in British Columbia ever since with his novel audio-visual productions about the Solar System and Canada's involvement in space research.



ASTEROID Named for Jack and Alice Newton

We are absolutely thrilled to have been advised that Asteroid 30840, discovered on April 15, 1991 by Caroline Shoemaker and David Levy at Mount Palomar, has been named "Jackalice".

This is a special honour (that's "honour" to our American friends!) for us that we wanted to share with you.

Hope you're all enjoying the best of health and happiness,

Jubilantly yours, with wishes for clear skies always,

Jack and Alice Newton

2005 Awards

Newton/Ball Award

Named for Jack Newton and George Ball this award recognizes a member for his or her personal dedication to the activities past and present that have benefited all member of the Victoria Centre. This years recipient is **Sandy Barta**.

In the history of our Centre Sandy Barta has been the president, pastpresident, new member liaison, newsletter editor, Astronomy Cafe host, Council Member at Large, Astronomy Day Volunteer Coordinator and outreach astronomer extraordinaire, to name just a few. Most importantly, she is a

constant source of support, encouragement, information, expertise and enthusiasm for astronomy and the Victoria Centre of the RASC. Without her many of us would not know the excitement and wonder of a starry night.

Ernie Pfannenschmidt Award for Amateur Telescope Making

Presented to **Guy Walton** for his contributions in rebuilding the Centre's 20 inch truss-dobsonian telescope.

Award for Astrophotography

Planetary Imaging—Joe Car
Wide Field Imaging—David Lee
Wide Field Deep Space— John McDonald
Deep Space Imaging—Don and Elizabeth van Akker
Astronomical Observation and Sketching—Bill Wier

Uvic Astronomy Student Award

This award goes to the most promising undergraduate astronomy student as nominated by the Uvic Astronomy Department. This years recipient is **Christopher Avis**.

Certificates of Appreciation

Jacklyn Porter, Kevin Ferris and Jim Hesser of the HIA for their continuing support of the RASC observers and the development of the *License to Use Land Agreement*.

Mark Wheen for his support of the Pearson College observing site.

Frank Ogonoski for his continued support of the RASCal's star party.

Sid Sidhu for maintaining the Centre's telescopes and managing our BC Gaming Funds

Centre of the Universe

Join us for our December Star Party this Saturday, December 3rd from 7:00 - 11:00 pm. The theme is the Gemini Telescopes - we'll have Dr. Dennis Crabtree from the HIA here at 8:00 pm to talk about Canada's involvement in the twin 8 meter Gemini Telescopes. After his talk, we'll hook up a video link to Gemini North in Hilo, Hawaii and chat with one of the astronomers there. Of course, we'll also have tours of the big telescopes, planetarium shows, and observing if it's clear. This is our last evening event of the year - don't miss out!

Christmas is just around the corner.. And here's some Holiday news for you!

Christmas Shutdown

Together with the rest of the National Research Council of Canada, the Centre will be shutting down over the Holiday season to allow staff to spend time with their families and friends. The Centre will close at 4:30 pm on Thursday, December 22nd and reopen at 10:00 am on Tuesday, January 3rd.

Astronomy Gift Ideas

Are you buying for an astronomy fan this year? Come check out the Centre gift shop! We've got lots of great gifts ideas for people of all ages - highlights include Mars books for kids and adults, two beautiful coffee table books, the new RASC Observers Handbook, the new 2006 Astronomy calendar, lots of cool kid's books and activities (in English _and_ French!), Solar System umbrellas, and lots and lots of glow-in-the-dark stuff! We even carry gift wrap, ribbon, small gift bags and some holiday decorations. The gift shop is open during regular Centre hours, and closes a half-hour before the Centre closes.

Season's Pass Sale

To celebrate the holiday season, we're offering a sale on our season's passes. From now until December 23rd, if you buy one season's pass at full price, you'll receive a second of equal or lesser value for half price! Season's passes get you free into Centre events for one full year from date of purchase - this includes all our popular summer Star Parties. It's a great deal!

Regular season's pass rates are:

 Adults:
 \$25+GST

 Seniors (65 or older):
 \$21+GST

 Students (13-18):
 \$21+GST

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Youth (4-12): \$15+GST Families: \$65+GST 2 adults and 3 children under 18)

Book your Christmas Party at the Centre of the Universe!

The Centre of the Universe could be exclusively yours for the evening! Enjoy an elegant sit-down dinner in the Black Hole Theatre, canapés under the Milky Way, or take in the best views of Victoria and the cosmos from our observation deck. Your group could also tour the constellations in our SunDome Planetarium, pick up a 50,000 year old meteorite, be entertained by the Asteroid Collision Blues or the Backpacker's Guide to the Universe, or compete in a Deep Space Challenge. For more information on evening functions, including rates and availability, please call the Centre at 363-8262.

Asteroid Observer's Club

Do you know a Grade 11 or 12 student who's really into astronomy? Tell them about the new Asteroid Observer's Club! This club will give students the chance to participate in real astronomical research. Starting in the middle of January, the club will meet weekly to learn about potentially hazardous asteroids and how astronomers track them. Club members will write a real proposal to use the Plaskett Telescope, and if it is successful, will participate in real observing sessions to track asteroids.

The Asteroid Observer's Club meetings will start the week of January 16th - the day and time of meetings will be chosen based on club members' schedules. Registration fees are \$75+GST for the 8 weeks of classes, and then \$10+GST per month afterwards for club dues. The club is designed for students in Grade 11 and 12 - younger or older students should contact the Centre to discuss their enrolment.

To register for the Asteroid Observer's Club, please call the Centre at 363-8262. Space is limited, so sign up early to avoid disappointment!

Night Courses in the New Year

Expand your universe with an astronomy course at the Centre of the Universe! Our 9 - 12 hour courses are designed to give you a basic introduction to practical astronomy, with emphasis on the constellations, planets and deep sky objects of the season. Designed to be both recreational and educational, our courses will be taught by astronomers working at the Centre and will give you a unique opportunity to tour the Plaskett 1.8m telescope, work in the Skylab planetarium, and observe with research-grade telescopes. As well, each course will focus on a specific topic in astronomy.

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Registration is open now for the Planets course, running from 7:00 - 10:00 pm on January 24th, 26th, 31st and February 2nd. Take a tour of our Solar System and explore all its orbiting bodies - planets, asteroids and comets - including the newly discovered and possible 10th planet 2003 UB313. Courses about Stars, Galaxies and Beyond will run in March, April and June.

Course fees are \$120+GST for the four evenings, or \$105+GST for season's pass holders. The first evening of each course will offer a general introduction to astronomy. If students have taken previous courses, this first evening is optional and the course fee will be reduced to \$90+GST for three evenings (\$80+GST for season's pass holders). Our courses are most appropriate for adult learners. Any interested students under the age of 18 are asked to contact the Centre to discuss their enrolment. All courses will be held at the Centre of the Universe, located at 5071 West Saanich Road . For more information or to register, please call the Centre at 363-8262.

The Sky This Month

December 1 New Moon (7:01 am PST)

December 4 Moon 4° south of Venus

December 8 First Quarter Moon (1:36 am PST)

December 12 Crescent moon between Mars and Pleiades
December 14 Geminid Meteor Showers Peak before dawn

December 15 Full "Cold" Moon

December 19 Crescent moon 3° northeast of Saturn before dawn

December 21 Winter solstice (10:35 am PST)

December 23 Last Quarter Moon (11:36 am PST)

December 25 Christmas Day

December 26 Boxing Day

December 30 New Moon (7:12 pm PST)

All times and dates local to Victoria, BC. Canada.

Happy holidays!

With December always comes the Geminid meteor shower, named for the constellation Gemini from which most of the "shooting stars" will appear to come. Usually, "shooting stars" occur when the orbit of the Earth passes through debris left behind from a comet. As the comet dust burns up in Earth's atmosphere, we are treated to meteor showers. The Geminids are slightly different in that instead of passing through comet dust, the Earth passes through debris left behind by an asteroid called Phaethon. This is the only

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known annual meteor shower to be caused by an asteroid - a rocky leftover from the formation of our solar system. This year's Geminids will peak on the evening of December

14th. Go outside between 10 pm and dawn (local time) and look for two bright stars perpendicular to the Eastern horizon; these are the heads of the twins, Castor and Pollux. Lie on the ground in an open, clear area with your feet pointing towards these stars and look up! This year's Geminids will unfortunately coincide with the full moon. This doesn't mean that you shouldn't try to see them, however. Our suggestion is to find some way of blocking out the light from the full moon - by using your hand, or maybe a chair, or park yourself in line with a tree. Don't forget to bundle up!

December 21 marks the shortest day and longest night of the year! The sun will reach its most southern descent in our skies at 4:43 am December 21st (local time). This signals the beginning of winter in the Northern Hemisphere. The good news is that every day after that will get gradually longer and longer.

The winter constellations will shine high above the South East horizon at 8pm through December. Sitting slightly above the horizon, look for the hourglass shape of Orion, the Hunter. Within the constellation Orion, you can find places where new stars are being formed. Under the far left hand star in the belt of Orion is the "Horse Head Nebula". The sword, the three stars under his belt, is host to another region of star formation called the "Orion Nebula". A small telescope or binoculars will show you, in fairly good detail, the cloud of gas and the brightest stars of the Orion Nebula.

Orion can be used as a tool for finding other constellations in the winter sky. Use the three stars in Orion's belt to point up to the "V" shaped nose of Taurus, the Bull. The brightest star in the "V" is Aldebaran, the "eye of the bull". Just to the right of Taurus, you will find a small grouping of bluish coloured stars called the Pleiades or the "Seven Sisters". The 500 plus stars of the Pleiades are classified as an open cluster. This cluster is one of the few that you can see easily with your unaided eyes.

There is yet another constellation that Orion can show us. You will see that Orion has two differently coloured stars, one red and one blue. Draw a line to between Rigel, the lower right blue star, and Betelgeuse, the upper left red star. If you extend this line past Betelgeuse you will reach two bright stars that sit almost perpendicular to the horizon. These stars make up the heads of the Gemini twins, in the Gemini constellation, and are called Castor (on top) and Pollux (below).

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Look above the Eastern horizon around 9 pm, just below Gemini, to see a bright yellow "star" as bright as Castor and Pollux. This "star" is actually the planet Saturn.

Speaking of planets, Venus and Mars are still shining brightly in the evening sky. Look for the very bright Venus to the southwest and the red planet Mars to the southeast, just after sunset. Expect them to hang around into the New Year.

The Full "Cold" Moon or "Long Nights Moon" as named by the Algonquin people is the moon that signifies the onset of winter. It is at this time that the nights grow longer and darker and the cold weather tightens its grip. The Saanich people called this moon Sis,et—The Elder Moon. This is the oldest moon, the last of the year, leading into the shortening of days and the dying off of the year. The day of Winter Solstice was a day of great importance, a day in which elders traditionally taught the children about the right way to live. Ceremonies were held in the longhouses, new dancers were initiated and dances were watched and celebrated.

Clear skies and happy stargazing!

Stasia & Margaret

Mars Watch 2005— continues



Dec 9, 2005 22:45hr PST - Last night I had to go out for the early part of the evening but when I got home around 2200 hrs my little 6" dob was already waiting for me outside. Mars rested in the only clear patch in the sky. I didn't expect much but was pleasantly surprised. It took my apodizing screen and red a blue filters to tease out the detail. Violet clearing appears to be receding as detail was much more muted. I was using powers of 200-250X. Here is what I saw. Bill Weir

Dec 10, 2005 10:30pm - A frustratingly long stretch of storms and clouds have kept us from observing Mars for the last three weeks, but finally we had a break for a couple of evenings. Mars is now smaller than in late October and November, however there is still much planetary detail to observe and photograph. Joe Carr



Island Eyepiece and Telescope



Contact US On-Line

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Address Change? Information Incorrect?

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The deadline for the next issue of Skynews is

December 23, 2005

Get your Skynews early and in colour.

Tell Joe Carr (vp2@victoria.rasc.ca) that you want to get Skynews on line and we won't mail you a copy

Yes, We post important, timely, member-related news to our email list.

Online information about the RASCVic and Skynews email lists: http://victoria.rasc.ca/click on: 'Members Only'

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RASC Victoria Council

This Month

President: Scott Mair 3860 Grange Road Victoria, BC V8Z 4T5 881-1345 smair@crd.bc.ca

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Second Vice-President Joe Carr

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Honorary President: George Ball

Librarian & Telescopes: Sid Sidhu sid_sidhu@shaw.ca

Past President Chris Gainor National Representative: David Lee 479-5187 David Lee@telus.net

Website Editor: Joe Carr Email list: Joe Carr web@victoria.rasc.ca

Members at Large: Bill Almond, Jim Hesser, Ed Maxfield, Blaire Pellatt, Colin Scarfe, Rich Willis

New Members Liaison: Sandy Barta



Astronomy Cafe

At Bruno Quenneville's 2019 Casa Marcia Crescent, Victoria, BC. Call 477-2257 for more information or directions.

Newcomers are especially welcome. Come and enjoy!

Astro Imaging

Is cancelled this month for the holidays season

Third Wednesday of the month if it's clear at Bill Almond's

354 Benhomer Drive

Call Bill to confirm 478-6718

Cancelled This month

New Observer's Grow At Sid Sidhu's:

1642 Davies Road (off Millstream Lake Road) at 8:00 PM.
Call 391-0540 for more information or directions

Wednesday January 11

january Meeting

7:30 pm Elliott 060 UVic

