ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Web Page of the Month



Thanks to CASCA's new education website, teaching astronomy in Canada has never been easier....

http://www.cascaeducation.ca/files/index.html

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Skynews





Number 249

http://victoria.rasc.ca/

This Month

Matteo Monelli

Globular Clusters and Dwarf Galaxies

Matteo will revise some general concepts of stellar astrophysics and show the kind of work he is doing with globular clusters and dwarf galaxies. He will also describe in more general terms the work at the Rome Observatory, the instrumentation they have, and the facilities (mostly ESO instruments) that astronomers usually use in Italy.

Matteo was born in Mantua, a small city in the north of Italy, and moved to Bologna where he received a degree in Astronomy in 2001. Soon after he moved to Rome to start his PhD studies. Matteo should graduate at the end of 2004.



http://www.mporzio.astro.it/

Contact US On-Line

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Victoria Council members:

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

RASC Victoria Council	This Month	
President: Chris Gainor 1490 Thurlow Road Victoria, BC V8S 1L9 380-6358 cgainor@islandnet.com Vice President: Bruno Quenneville 477-2257 brunoq@shaw.ca Treasurer: Laura Roche 8581 Sentinel Place Sidney, BC V8L 4Z8 656-2396 Iroche@shaw.ca	On <i>CLEAR</i> Fridays	At Sandy Barta's, 2949 Michelson Road, Sooke, BC Call 642-0205 for more information or directions. And you WILL need directions! Newcomers are most welcome. Come and enjoy! Note: The Café will no longer be every Friday night.
Secretary and Recorder: Li-Anne Dorrance lidorrance@aol.com Honourary President: George Ball		Call or check our website to find ou if it's likely to be clear.
Librarian & Telescopes: Sid Sidhu J.SSidhu@telus.net Past President and National Representative: David Lee 479-5187	Dec 26	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
David_Lee@telus.net Skynews Editor: Sandy Barta Website Editor: Joe Carr Email list: Joe Carr web@victoria.rasc.ca	Jan 14	January Weeting 7:30 pm Uvic, Elliott 060
Members at Large: Bill Almond, Jim Hesser, Ed Maxfield, Frank Ogonoski, Blaire Pellatt, Colin Scarfe, Rich Willis New Members Liason:	Dec 17	Every 3 rd Wednesday Astro Imaging at Bill Almond's 354 Benhamer Drive
Yes, We post important, timely, member-related news to our email list.		478-6718 Online information about the RASCVic and Skynews email lists: http://victoria.rasc.ca/click on: 'Members Only'

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Future Meetings

General Meeting—January 14

We're going to show off! Bring slides of the pictures you took of Mars, the lunar eclipse, or other sky image—anything that bores your regular friends to tears. Be prepared to brag and tell us how you bagged your image.

Please contact Bruno (477-2257 or brunoq@shaw.ca) and tell him what you want to show.

Address Change? Information Incorrect?

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Fax: (416) 924-2911

E-Mail: mailto:mempub@rasc.ca Website: www.rasc.ca

Postal Mail: RASC, 136 Dupont Street, Toronto, ON M5R 1V2, Canada

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

President's Message

This December 25th, I won't be thinking about silvery globes hanging from Christmas trees as much as a certain reddish snow-capped globe in the sky.

Is this a hangover from all the Mars observing we all did this year? Not exactly, because Christmas Day will also mark the arrival of two new spacecraft at the Red Planet.

Mars' close passages to Earth interest more than astronomers. Those who shoot spacecraft to Mars must line up their launches to take advantage of Mars coming close to Earth.

By the time you read this column, we will probably know if the Japanese Nozomi spacecraft, which has a Canadian experiment to measure the Martian atmosphere on board, has survived a very prolonged and troubled flight to Mars.

Next up is the European Space Agency's Mars Express spacecraft, which is due to enter Mars orbit on Christmas Day. The British Beagle 2 probe is supposed to land on Mars the same day, a few days after being released by Mars Express.

In January, two American rovers are due to land on Mars. The first, Spirit, is due to land on January 3, and the second, Opportunity, is slated to land on January twenty-fourth.

All these spacecraft will join the Mars Global Surveyor and the Mars Odyssey spacecraft, which are still hard at work photographing and measuring Mars from their orbital perches.

There's more excitement farther out in the solar system, too. On January 2, the Stardust probe will encounter the comet Wild 2 and collect some samples of the comet

Later in the year on July 1, the Cassini spacecraft is scheduled to go into orbit around Saturn. Its Huygens probe is due to land on Titan early in 2005.

While clouds and cold weather will turn us into armchair astronomers over Christmas, the probes arriving at Mars will hopefully give us more treats from the Red Planet to cap off a memorable year for Mars lovers.

Chris Gainor

The deadline for the next issue of Skynews is

December 27 2003

Get your Skynews early and in colour. Tell Lauri, our Treasurer, that you get Skynews on line and we won't mail you a copy.

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December 2003 SKYNEWS 2

Exnie (fannenschmidt 1923-2003



Ernie Pfannenschmidt

who was known as one of the more outspoken and colourful members of the Victoria Centre, passed away on November 17, 2003, at the age of 80.

The news of Ernie's passing came as a surprise to everyone, as he was a vigorous man in good health, and appeared to be younger than he was. At the time he died, Ernie was scheduled to speak to the December meeting of the Victoria Centre. A few days after his death, a Barlow lens he had recently made was one of the door prizes at the Victoria Centre annual banquet.

Born Ernest Ludwig Pfannenschmidt in Hamburg, Germany on March 7, 1923, he developed an interest in astronomy at a young age and became an optical engineer.



While Ernie liked observing all sorts of astronomical objects, he had a special passion for Mars. In the early 1950s, he appeared on the cover of the popular German newsmagazine Der Spiegel looking through a lens as part of a feature on Mars observing. Earlier this year, he addressed the Victoria Centre on his 65 years of Mars observing, and he lived to see the Red Planet's closest passage to Earth in 60,000 years just a few weeks before his passing.

After Ernie and his family came to Canada, he found work at the Dominion Astrophysical Observatory, where he worked on optics for 20 years. His skills helped enhance the quality of telescopes in various parts of the world, including site testing for observatories on Mount Kobau and in Saudi Arabia that unfortunately were never built.

As mentioned, Ernie became a popular speaker on optics and astronomy, and he also wrote for Sky and Telescope, the RASC Journal and other publications. This past spring, he had an article on apodizing filters in the Journal and on a crutch tripod in Sky and Telescope, which has one more article from Ernie to publish. Astronomers will consult these articles for many years to come.

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Cover

The sun's been most peculiarly active the past few months—we're long past solar maximum. To our great joy, the sun's activity has meant that we could enjoy displays of bright aurora. Bill Weir snapped a few pictures from Metchosin.

http://albums.joetourist.net/billweir/



Happy Holidays to all from the Centre of the Universe!

I hope you are all enjoying this wonderful fall! The Centre of the Universe is currently open Tuesday through Saturday from 10 am to 5:30 pm. Come up and enjoy some great programs and a stroll around our exhibit hall. We may even have some small telescopes out on clear evenings once the sun sets! Don't forget to do your Christmas shopping at our gift shop for the astronomer in your life! We carry a great selection of books, telescopes and telescope accessories, and toys for kids of all ages! Please don't hesitate to call us at 363.8262 should you have any questions about our schedules or gift shop items.

Please note: the Centre of the Universe will close for the holidays on December 24th, 2003 at 12 pm. We will reopen on January 3rd, 2004 at 10 am.

Cassie Holcomb, Interpreter Centre of the Universe

ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Annual Report 2003 Continued

new domain name: victoria.rasc.ca and the private ISP is providing various enhanced services: email lists, private members website, generic email accounts for members of council. The new Webmaster, Joe Carr, is reworking, upgrading, and expanding the website content. Thanks to the past Webmaster, David Lee, who was responsible for the formative years of the Victoria Centre website.

The Victoria Centre continues to meet on the second Wednesday of every month (except July, August, and November) at 7:30pm at The University of Victoria in the Elliot building room 061.

Many thanks to all the speakers, members and volunteers whose dedication and hard work have made this past year very successful.

Robert Walker Secretary, Victoria Centre



As I slowly chew my way through the Centre's history based on old local records and the RASC's Annual Reports, there's a puzzling discrepancy...as most of you already know, what's missing are photographs. There are almost none at all, which makes me wonder whether anyone in the Victoria Centre even owned a camera for 50 or 60 years! I checked out the library at the DAO but, naturally, their pictures are mostly professional ones made at the time the Plaskett scope was built and a succession of their top brasses. Sid says there are no photos in his files. Fortunately, our more recent history is well documented, which brings me to the point: It would be great if any Centre pictures in your possession could be given or emailed to me for perusal and possible use. Content info with dates, places and names is very important, if it's available, as is other Centre memorabilia concerning special events, etc.

Bill Almond

treat

Here's some Astro candy for your enjoyment. (Click on the F11 key as it starts to make it even better.)

http://wires.news.com.au/special/mm/030811-hubble.htm

Ed Majden and Steve Rayner

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Ernie Continued

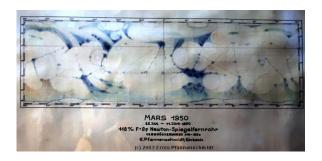
Ernie had strong opinions on many subjects and was not afraid to voice them. While he delighted many people with his innovative contributions to every facet of amateur and professional telescope making, he was not a fan of Schmidt-Cassegrain or similar telescopes. His opinions were always delivered in a goodnatured manner, and even though I own a Maksutov, I always looked forward to my encounters with Ernie.

As much as he loved the stars, Ernie also loved the sea. He was a nautical engineer who designed ships, and he loved fishing and sailing. He was for many years the greeter at the Victoria Classic Boat Festival.

He was married to his wife Marlene for 55 years, and he is survived by his wife, two sons, two daughters, several grandchildren and one great-granddaughter.

I was a neighbour of Ernie¹s in Fairfield, and I would often see him as I arranged for his talks to the Victoria Centre or just run into him on the street. My last visit to his home was three weeks before he died, when he gave me the Barlow lens for the annual banquet. We had a chat about telescopes and his observations of Mars the night before through one of his refractors. A bucket of fish he had just caught stood in the kitchen. Ernie could find the planets and stars in his back yard, and the sea was just a short walk away.





5" f/15 Folded Refractor

Ernie's hand drawn Mars map—1950

Chris Gainor

The Space Place



Stardust

Philosophers have long sought to "see a world in a grain of sand," as William Blake famously put it. Now scientists are attempting to see the solar system in a grain of dust-comet dust, that is.

If successful, NASA's Stardust probe will be the first ever to carry matter from a comet back to Earth for examination by scientists. It would also be the first time that any material has been deliberately returned to Earth from beyond the orbit of the Moon.

And one wouldn't merely wax poetic to say that in those tiny grains of comet dust, one could find clues to the origin of our world and perhaps to the beginning of life itself.

Comets are like frozen time capsules from the time when our solar system formed. Drifting in the cold outer solar system for billions of years, these asteroid-sized "dirty snowballs" have undergone little change relative to the more dynamic planets. Looking at comets is a bit like studying the bowl of leftover batter to understand how a wedding cake came to be.

Indeed, evidence suggests that comets may have played a role in the emergence of life on our planet. The steady bombardment of the young Earth by icy comets over millions of years could have brought the water that made our brown planet blue. And comets contain complex carbon compounds that might be the building blocks for life.

Launched in 1999, Stardust will rendezvous with comet Wild 2 (pronounced "Vilt" after its Swiss discoverer) on January 2, 2004. As it passes through the cloud of gas and dust escaping from the comet, Stardust will use a material called aerogel to capture grains from the comet as they zip by at 13,000 mph. Aerogel is a foamlike solid so tenuous that it's hardly even there: 99 percent of its volume is just air. The ethereal lightness of aerogel minimizes damage to the grains as they're caught.

Wild 2 orbited the sun beyond Jupiter until 1974, when it was nudged by Jupiter's gravity into a Sun-approaching orbit-within reach of probes from Earth. Since then the comet has passed by the Sun only five times, so its ice and

Continued on page 6

ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Annual Report 2003 Continued

The Third Annual RASC Victoria Centre Star Party September 19 and 20 at the Victoria Fish and Game Association was a success. Friday evening started out with several excellent presentations, after which everyone headed outdoors to find clear skies and a night of very enjoyable observing. Saturday evening also saw a number of interesting presentations. The Victoria Centre is grateful for the hard work of Rich Willis in the organization of the Star Party. In late July, many Victoria centre members also attended the Island Star Party put on by our good friends, the Cowichan Valley Starfinders.

This year saw the Victoria Centre membership continue its modest growth, but we were also saddened by the loss of longtime members John Howell and Ernie Pfannenshmidt. John made major contributions to our centre and to the Calgary Centre. Ernie was a long time RASC member, a DAO staff member for more than 20 years, and a regular contributor to Sky and Telescope. Both will be greatly missed.

For the benefit of the members, the centre now has 14 telescopes that are lent free of charge. The club also continues to maintain and enhance a valuable library for the benefit of members. Sid Sidhu, who has been looking after the telescope, library, and school outreach programs, was chosen for the Newton-Ball Award last year for his outstanding service to the centre. The centre congratulates Sid for this achievement and thanks him for his enthusiastic dedication. This past year also saw Victoria Centre member Christopher Spratt donated his meteorite and tektite collection to the National Meteorite Collection of Canada. The collection, which includes 800 samples from more than 400 meteorites, adds 76 previously unrepresented meteorites to the national collection.

2003 was the centennial of the national society's Royal designation, and more than a dozen members from Victoria were on hand at the RASC General Assembly at the end of June in Vancouver to join in the celebrations.

The Light Pollution Abatement Committee efforts continued this year. The City of Victoria, Mayor and Council were presented with a petition concerning the effect of inefficient streetlights depriving its citizens of the enjoyment of the night sky. With respect to the light pollution issues the City of Victoria has instructed staff to "add a lighting review to the City's Design Guidelines". A large concentration of big business stores in the Western Communities is a concern to the Light Pollution Committee, especially the ones at high elevation and in direct line of site to the DAO. A plan is underway to make personal contacts with these businesses to highlight effects of light pollution on the astronomical research activities at the DAO.

This year the Victoria Centre website migrated from the Victoria Freenet to a private ISP, with donated website and email service being provided. We have a

Continued on page 11

RASC Victoria Centre Annual Report 2003

Here's the Secretary's Annual Report for those who didn't make it to the Annual Meeting.

The Victoria Centre experienced another successful year due to the outstanding efforts, dedication and enthusiasm of its members. These efforts allow the centre to maintain a very extensive list of programs, events and public outreach. A sample of regular centre activities include: our regular monthly meetings, Saturday and Sunday evenings at the Dominion Astrophysical Observatory, our new Sidewalk Astronomy program organized by Blaire Pellatt, and Sandy Barta's Astronomy Café every Friday night where all things astronomical are discussed and, if it's clear, everyone observes under the beautiful, dark Sooke skies. Sid Sidhu's beginners observing sessions are also held once a month weather permitting at Sid's house under the dark skies of the Highlands.

The centre also offered a number of special event and public outreach programs this year.

Twenty-four public and private schools, Cubs, and Brownie groups took advantage of the School Telescope program. This included classroom presentations, Solar observing, and night sky viewing. Last year we have been able to reach more than 1300 youngsters in the Greater Victoria area and shared our joy of the heavens. Very many thanks to our dedicated volunteers for making this program such a success. International Astronomy Day 2003 was celebrated at the Royal British Columbia Museum on May 10 with a full schedule of day time activities which included a lectures series by professional astronomers, multimedia presentations, hands-on activities of grinding telescope mirrors, children's fun activities, displays of Solar System scale models, solar observing, and show & tell of different type of telescopes. In the evening, the public was invited to the Centre of the Universe for night sky viewing. It was a successful event and fun for all.

This year Mars had a special place in the hearts of the public and amateurs because of its close approach to the Earth. To take advantage of this event, on August 28th the Centre organized a public viewing of Mars at Cattle Point in Oak Bay. About 2,000 people enjoyed viewing Mars through more than twelve telescopes set up by the members. On instigation of a member of the Centre, the Victoria Centre again organized public viewing at Cattle Point; the objective this time was of the November 8 lunar eclipse. About 500 people turned out to enjoy this rare and dazzling sight.

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

The Space Place Continued

dust ought to be relatively unaltered by solar radiation. Some of this pristine "stuff" will be onboard Stardust when it returns to Earth in 2006, little dusty clues to life's big mysteries.

To learn more about Stardust, see the mission website at: stardust.jpl.nasa.gov/

Kids can play a fun trivia game about comets at: spaceplace.nasa.gov/stardust



NASA's Stardust mission will capture dust from comet Wild 2 and bring them back to Earth for study

by Patrick L. Barry and Dr. Tony Phillips

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Sky Software

Try one of astronomies best kept secrets, Cartes du Ciel. This is an amazingly powerfull program which can be integrated with a number of other programs to give all the functionality you would need as a beginner. And the best part is, ITS FREE!!

http://www.stargazing.net/astropc/download.html

Clear Skies. Ron Berard

And More to Enjoy

The Florida State University, Tallahassee, Florida has put up a very interesting Java applet on their site. It begins as a view of the Milky Way Galaxy viewed from a distance of 10 million light years and then zooms into towards Earth in powers of ten of distance. 10 million, to one million, to 100,000 light years and so on and then when it finally reaches a large Oak tree leaf. But that is not all it zooms into the leaf until it reaches to the level of the quarks viewed at 100 attometers.

http://micro.magnet.fsu.edu/primer/java/scienceopticsu/powersof10/inde x

This is a fantastic representation of how magnificent the Universe is and how vastly infinite it is both in the macroscopic and the microscopic level.

Joe Carr

Anne Underhill

Our recently-delivered edition of The Journal/Oct. 2003 contains the obituary of Dr. Anne B. Underhill, who died peacefully on Oct. 3, 2003. Anne Underhill's name will be unknown to most of today's members of the Centre, but it is to be hoped that all of you will read her obituary because she figured prominently in the Centre's activities for a number of years. If you haven't yet read it, I suggest you take a look at it to realize what an amazing person she was ... totally dedicated to science and the many scientific organizations with which she was allied. Even more importantly, as far as the Centre is concerned: she found time to sit on the Centre's council from 1950 to 1962, filling the positions of Councillor and First Vice-President, besides which, my records show that Dr. Underhill gave a number of talks to the Centre membership. Late in 1962 she moved to the University of Utrecht.

The RASC and the Victoria Centre are very fortunate to have had such a distinguished astronomer and astrophysicist as a national member for some 60 years of her life and as a Victoria Centre member for 12 years.

Bill Almond

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ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Awards

Both Scott Mair and the RASC were awarded 2003 Michael Smith Awards from Industry Canada last night? The basic info is on the NSERC web site: http://www.nserc.gc.ca/news/2003/p031119.htm

Scott was also honoured with the US National Association Interpretation" Master Interpreter title.

More information about this Award will be in the President's Corner in the December issue of the Journal. As well, the February 2004 issue of the Journal will have more to say about the MSA award.

On Wednesday, November 19, at the Canadian Museum of Nature in Ottawa, Rajiv Gupta, on behalf of the Society, accepted the 2003 Michael Smith Award for Science Promotion. Below is the text of Rajiv's acceptance speech.

Dr. Lloyd, Dr. Scaiano, (Government Representative), Mme Benoit:

As national president of the Royal Astronomical Society of Canada and one of its thousands of members, I am delighted to be here this evening on behalf of the RASC to accept a Michael Smith Award for Science Promotion. Recognition by the MSA Selection Committee is deeply meaningful to us, as it reaffirms our great pride in our Society and our belief that the RASC is special in the worldwide community of stargazers. There are many astronomical clubs in North America and elsewhere, but the RASC is the only organization of amateur astronomers that has a strong presence nationally, through our 27 "Centres." It is the unique combination of local and national activity that the RASC engages in that makes us such an important player in astronomical outreach and promotion. Our Centres provide a wide range of public programs; the strength of our members as a whole allows us to produce an annual astronomical handbook that is regarded as the bible for North American stargazers. All of these activities are carried out by volunteers who have a driving passion for astronomy and for sharing the beauty of the universe with others.

This award is very much a recognition of each and every one of our 4700 members from coast to coast, and I would like to thank all our members for their tremendous dedication to astronomy and to the Society. I would also like to thank two members in particular who were largely responsible for compiling the successful MSA nomination: James Edgar and John Percy.

The RASC is very grateful to NSERC for the recognition it has bestowed upon us, especially during the year in which we are celebrating 100 years of Royal designation. We are eagerly looking forward to continuing our astronomy outreach and promotion programs through our second Royal century.

Rajiv Gupta

Nov. 19, 2003

Bonnie Bird, Executive Secretary Royal Astronomical Society of Canada