

Volunteer for Astronomy Day

International Astronomy Day (IAD) 2006 is **Saturday, May 6** at the Royal British Columbia Museum. Evening/night sky viewing is at the Centre of the Universe from 7pm to 11 pm.

I have listed our activities below—you will assist the person in charge of the activity you have chosen. Please let me know if you can help out and when you would be able to help out:

Friday, May 5

Set up Friday afternoon from 2:30 to 5:00 p.m.

Saturday, May 6, 8:00 a.m. To 10:00 a.m.

Last-minute set-up

Saturday, May 6, 10:00 a.m. to 4:00 p.m.

Information/Reception Desk
Guide (helping the public find activities)
Solar observing (with safe, inspected equipment!)
Lunar and planetary observing during the daytime
Solar observer relief
Occultation observing (relief and assistant)
Mirror making (helping visitors try grinding a mirror)
Solar system scale model
Telescopes & binoculars
(Galileo model and demonstrating modern instruments)
Imaging the Moon with a digital camera
Light pollution display and petition
Children's activities
General relief

Take down after 4:00 pm to 5:00 p.m.

Saturday, May 6, 7:00 p.m. - 11:00 p.m.

Evening observing at the Centre of the Universe

Thanks, Sandy SBARTA@SHAW.CA

skynews



Dr. Carolyn Porco
Adventures in the promised land: Cassini explores Saturn, Titan and the fountains of Enceladus
Wednesday, May 3, 7:30 pm, David Lam Auditorium, MacLaurin Building, Room A144, University of Victoria

A glistening spaceship, with seven lonely years and billions of miles behind it, glides into orbit around a ringed, softly-hued and dream-like planet. A flying-saucer shaped machine descends through a hazy atmosphere and lands on the surface of an alien moon, ten times farther from the Sun than the Earth. Fantastic though they seem, these visions are not a dream. The Cassini spacecraft and its Huygens probe have traveled invisible interplanetary roads to the place we call Saturn. Their successful entry into orbit, the mythic landing of Huygens on the cold, dark equatorial plains of Titan, and Cassini's explorations of the saturnian environment are already the stuff of legend. What they have shown us thus far, and the images they have collected, are being closely examined in the pursuit of precise scientific information on the nature of this very alien planetary system.



Come along for the ride, and witness the sights and magic worked by these emissaries from Earth to the enchanting realm of Saturn.

Dr. Carolyn Porco is the leader of the Cassini Imaging Science team and the Director of the Cassini Imaging Central Laboratory for Operations (CICLOPS) at the Space Science Institute in Boulder, Colorado (<http://ciclops.org>). She is also an Adjunct Professor in the Department of Planetary Sciences at the University of Arizona in Tucson, and in the Department of Astrophysical and Planetary Sciences at the University of Colorado in Boulder. Her specialty is the study of planetary ring and moon interactions.

For extended bio see: http://www.edge.org/3rd_culture/bios/porco.html

RASC victoria council

this month

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New Member Liaison

Sandy Barta
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monday nights

Astronomy Cafe

Fairfield Community Centre,
 1330 Fairfield, Victoria
 7-11pm

Call 477-2257 for directions or more information.

New comers are especially welcome. Come and enjoy!

second wednesday of the month

Monthly Meeting

7:30 PM, Elliott Lecture Theatre, Rm 060, UVic

third wednesday of the month

Astro Imaging

Hosted by Bill Almond
 354 Benhomer Drive
Only if the sky is clear.
 Call Bill to confirm: 478-6718

as sky and interest dictate

New Observers Group

Hosted by Sid Sidhu
 1642 Davies Road, Highlands
 Call 391-0540 for information and directions.

by email

**Observer/CU Volunteers/
 Members email lists**

Contact Joe Carr to subscribe to these email lists for important, timely, member-related news.

continued from page 9

those of today.

Another example: An NMP test mission called Space Technology 9, which is still in the planning phase, may test-fly a solar sail. Solar sails use the slight pressure of sunlight itself, instead of heavy fuels, to propel a spacecraft. Two proposed NASA missions would be possible only with dependable solar sails—L1 Diamond and Solar Polar Imager—both of which would use solar sails to fly spacecraft that would study the Sun.

“The technologies that we validate have future missions that need them,” Stocky says. “We try to target [missions] that are about 15 to 20 years out.”

A menagerie of other cool NMP technologies include ion thrusters, hyperspectral imagers, and miniaturized electronics for spacecraft navigation and control. NMP focuses on technologies that have been proven in the laboratory but must be tested in the extreme cold, vacuum, and high radiation environment of space, which can't be fully recreated in the lab.

New NMP missions fly every year and one-half to two years, taking tomorrow's space technology for a daredevil test drive.

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

*This and that***Stand and be Counted**

At the end of October the terms for the President, 1st VP and two Members at Large will become vacant. Any members wishing to stand for council office are very welcome to apply. Please contact Scott Mair (scottmair@gmail.com) if you are interested in standing for office or would like more information about what sitting on our Centre's Council entails.

After Long Service

May marks the last time Bill Almond will host the astrophotography group. Many thanks to Bill for all of his generosity and enthusiasm.

Also, huge thanks to Bruno for opening up his home and the convivial atmosphere he created at our Monday night Astronomy Cafe.

*on the cover***Charles Banville
M65, M66 and NGC 3628**

Taken: 22 April 2006

Telescope: Tele Vue NP-101 (540mm f/5.4)

Camera: Canon 20Da

Exposures: 11X60 sec @ISO 800 Processed with Images Plus.

*this month***Chris Gainor
Apollo and Lunar Science****Wednesday May 10, 7:30 pm, Rm 060, Elliot Lecture Hall, UVic**

The Apollo astronauts were sent to the Moon as part of a Cold War competition with Russia, and not in the name of science. But Apollo was reoriented to science, and its payoffs in new knowledge have been large but not well known to the public. This talk will look at the scientific legacy of the first human voyages to another celestial body.

*next month***Chris Onken****The Widespread Influence of Supermassive Black Holes**

A number of recent discoveries indicate that the evolution of a galaxy is strongly influenced by the supermassive black hole at its center. I will describe the evidence for this co-evolution of black holes and galaxies, and will discuss the current attempts to understand how this relationship has played out over the history of the universe and some of the key observational tests for these models.

Chris received his Ph.D. from The Ohio State University in 2005. He is currently a Plaskett Fellow at the Herzberg Institute of Astrophysics.

astronomy cafe

Hi RASC'als. Please make note of the following changes in the location of the Astronomy Cafe.

The Victoria RASC Astronomy Cafe is moving.. to the Fairfield Community Centre for the month of May.

The Location

1330 Fairfield Road, corner of Moss Ave. and Fairfield Road (please use the rear parking lot off of Thurlow just before Fairfield as you are driving down Moss)

The Building

The site being offered to us by the Community Centre is a permanent portable classroom adapted for society services and events. It is located at the rear Fairfield school complex with full washroom facilities, handicap access, a good night viewing field and easy access to the parking lot.

The Time

The building will be open for our use from 7:00 pm till 11:00 pm every Monday during the month of May, starting on May 1st.

We encourage all Astronomy Cafe regular visitors and new comers alike to join us for an evening beneath the stars, good fellowship and yes... a good supply of coffee and cookies as usual.

Your co-hosts for the month of May will be John McDonald and Bruno Quenneville RASC-VP Victoria Centre. For additional details please contact Bruno at 477-2257 or email at brunoq@shaw.ca.

The format for this very popular event has not changed, just the location. As in previous years, the Cafe will be closed for the months of June, July and August and will re-open on the 1st Monday of September (location to be confirmed by early August, check our website at that time for more information)

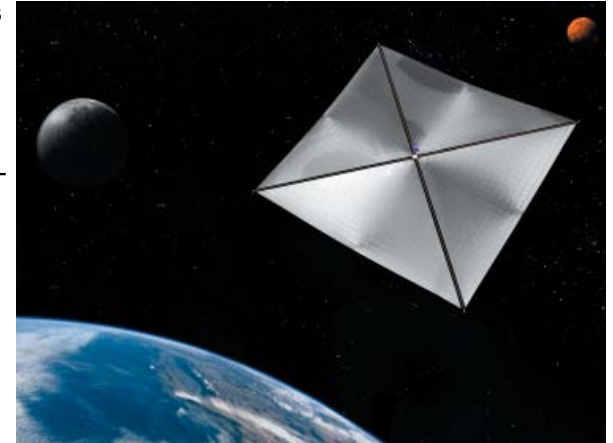
*astro news***Who Wants to be a Daredevil?**

By Patrick L. Barry and Dr. Tony Phillips

When exploring space, NASA naturally wants to use all the newest and coolest technologies—artificial intelligence, solar sails, onboard super-computers, exotic materials.

But “new” also means unproven and risky, and that could be a problem. Remember HAL in the movie “2001: A Space Odyssey”? The rebellious computer clearly needed some pre-flight testing.

Testing advanced technologies in space is the mission of the New Millennium Program (NMP), created by NASA’s Science Mission Directorate in 1995 and run by JPL. Like the daredevil test pilots of the 1950s who would fly the latest jet technology, NMP flies new technologies in space to see if they’re ready for prime time. That way, future missions can use the technologies with much less risk.



Example: In 1999, the program’s Deep Space 1 probe tested a system called “AutoNav,” short for Autonomous Navigation. AutoNav used artificial intelligence to steer the spacecraft without human intervention. It worked so well that elements of AutoNav were installed on a real mission, Deep Impact, which famously blasted a crater in Comet Tempel 1 on July 4, 2005. Without AutoNav, the projectile would have completely missed the comet.

Some NMP technologies “allow us to do things that we literally could not do before,” says Jack Stocky, Chief Technologist for NMP. Dozens of innovative technologies tested by NMP will lead to satellites and space probes that are smaller, lighter, more capable and even cheaper than

continued on page 10

continued from page 7

type) galaxies within 50 Mpc. During the past few years, my colleagues and I have been carrying out the definitive imaging survey of these galaxies using images from the Advanced Camera for Surveys on board the Hubble Space Telescope. In this talk, I will give a brief overview of the survey, and discuss some of exciting -- and unexpected -- results on the central structure of these old galaxies. The ACS Virgo Cluster Survey

8:00 pm Door prizes

8:30 pm Viewing the night sky till dawn.

Saturday 27th

all day - Solar observing

1:00 pm - Astronomy Swap Meet

2:00 pm - Workshop

“Digital Astrophotography” by David Lee and Joe Carr

7:00 pm - Presentation -

“Debris Disks Around Main Sequence Stars” by Dr.

Brenda Matthews, HIA - *During the last phases of a star’s formation, remnant solid material may agglomerate to form planetesimals in orbit within a disk around the parent star. Over time, due to forces of drag or the formation of large bodies (planets!), the planetesimals undergo collisions, returning them from larger bodies back to their previous micron scales of cosmic dust. These dusty “debris” disks are once again observable because the small dust grains both emit radiation at submillimetre wavelengths and scatter optical and infrared light from the star.*

Discovered unexpectedly in 1983 around Vega, debris disks are now sought using telescopes over a large range of wavelength; the presence of a debris disk can be a harbinger of planet formation around very young stars. I will present a history of this young research field, including images of disks detected around the lowest mass stars and optical images from the Hubble Telescope. 02.26.2004 - Astronomers find nearest and youngest star with a dusty debris disk. But are there planets

8:00 pm - Door prizes - including our grand prize draw

8:30 pm - Viewing the night sky till dawn.

Sunday 28th

8:00 am - Breakfast

9:30 am - Site Cleanup - thanks all to those who stay to help with the cleanup

12 noon departure please.

contact us on-line

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address change? information incorrect

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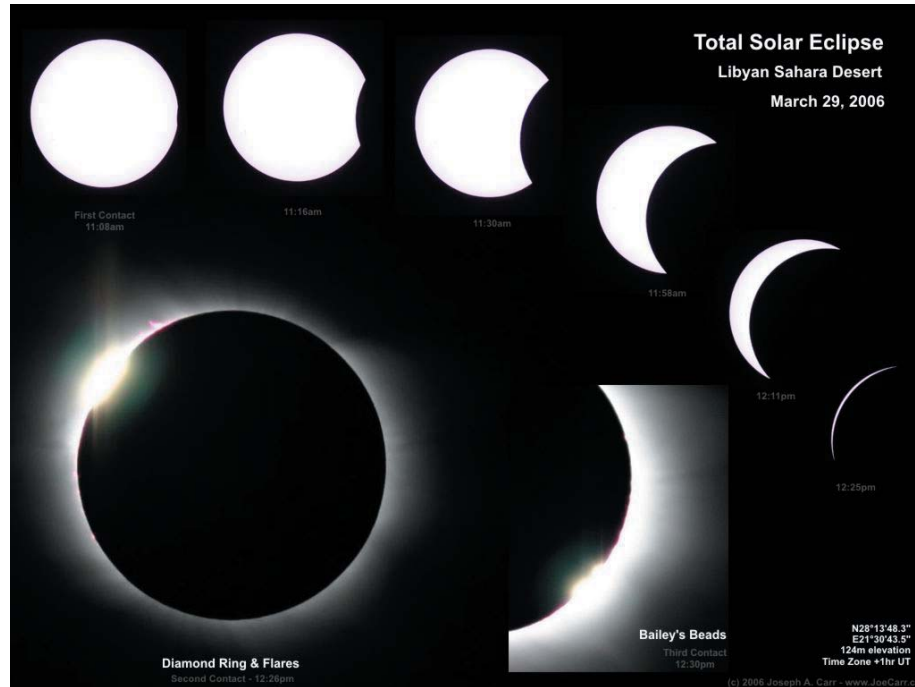


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Telescope: Tele Vue NP-101 (540mm f/5.4); Camera: Canon 20Da
Taken: 22 April 2006; Exposures: 3X60 sec @ISO 800



star party 2006

**May 26 - 28, Fish and Game Association
Holker Place, Malahat, BC**

Our Fifth Annual Star Party was a great success, so here we go again! This year we are holding the RASCALs Star Party in May instead of September. Gates will open at 12 pm noon on Friday May 26.

There is lots of space on the field for camping - you won't find any crowding here! You don't even have to cook at the RASCALs Star Party, since we have on-site catering available for all meals if you like. Camp on the field with your telescope. Power for telescope-related equipment only.

Door prizes are generously provided by our sponsors: Island Eyepiece and Telescope, Celestron, Sky Instruments, Pacific Telescopes, Victoria Centre RASC, Richly Maintained Services, and JoeTourist InfoSystems. We expect a great line-up of prizes again this year. You can buy additional draw prize tickets for \$5 up to draw time.

Cost

\$20 single and \$25 couple or family (max 4 children under age 21). Entrance Fee includes a ticket for door prize draws each day, all lectures and workshops, and camping on site. Attend for one hour or 3 days, same price - what a bargain! Cash only accepted for Entrance Fee on site.



RASCAL Star Party T-shirt

Pre-order your RASCALs Star Party t-shirts through our online store. Please note that no t-shirt sales will be accepted on site, so pre-order yours today!

Schedule Highlights (see website for up-to-date details)

Friday 26th

7:00 pm presentation

The Virgo Cluster: New Views from the Hubble Space Telescope by Dr. Patrick Côté, Herzberg Institute of Astrophysics, Victoria

The Virgo Cluster of galaxies is the dominant mass concentration in the local universe and by far the largest collection of old, gas-poor (early-

Continued on page 8