

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.

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



this month

Kim Ven
Chemical Evolution of Local Group Galaxies
 Wed, April 12th, 7:30 pm, Elliot Lecture Theatre, Rm 060, UVic

The chemical make-up of a galaxy changes with time as stars form, burn fuel in their cores, and then die away leaving behind the newly formed elements. Studying the chemical evolution of the old stars in a galaxy helps us to understand the formation of galaxies, as well as test fundamental physics about nucleosynthesis.

Biography

Kim Venn is an Associate Professor in Physics and Astronomy at University of Victoria, and a Canada Research Chair. She has been analyzing the chemistry of stars in nearby galaxies for nearly a decade using the large aperture telescopes (VLT, Keck, Magellan) and their high resolution optical spectrographs. She started in Astronomy at the University of Toronto, completing graduate studies at the University of Texas at Austin and postdoctoral work at the Max Planck Institute for Astrophysics in Munich, Germany. Before arriving at UVic, she held a Clare Boothe Luce professorship in Astronomy and Physics at Macalester College, Minnesota, and she was the recipient of a Presidential Early Career Award in Science and Engineering.

next 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.

RASC victoria council

President/SkyNews Editor

Scott Mair
 478-5416 scottmair@gmail.com

First Vice President

Bruno Quenneville
 477-2275 brunoq@shaw.ca

**Second Vice President/
 Website Editor/Email Lists**

Joe Carr
 web@victoria.rasc.ca

Treasurer

David Griffiths
 davidgriffiths@shaw.ca

Secretary and Recorder

Li-Ann Skibo
 liann.skibo@telus.net

Honorary President

George Ball

Librarian/Telescopes/Schools

Sid Sidhu
 sid_sidhu@shaw.ca

Past President

Chris Gainor
 cgainor@shaw.ca

National Representative

David Lee
 479-5187 David_Lee@telus.net

Members at Large

Bill Almond, Jim Hesser, Ed Maxfield,
 Frank Ogonoski, Blaire Pellatt, Colin Scarfe,
 Rich Willis

New Member Liaison

Sandy Barta
 sbarta@shaw.ca

*this month**monday nights*

Astronomy Cafe

Hosted by Bruno Quenneville
 2019 Casa Marcia Crescent
 Victoria, BC

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 8

winter are just above the horizon: The V-shaped head of Taurus the Bull next to the familiar hourglass shape of Orion.

Now look to the east to find Leo the Lion, often seen as a large backwards “question mark” or sickle - this represents the head and mane of the lion. Just to the left of Leo, you will find the familiar Big Dipper standing on its handle high in the northeast. Use the curve of the handle to “arc to Arcturus” a beautiful orange star in the east. Arcturus sits in the constellation Boötes, the herdsman. From Arcturus, you can “spike down to Spica”, a brilliant blue star in the constellation Virgo. The reappearance of these stars is a sure sign that summer is just around the corner. The Lyrids meteor shower offer a nice show of 10 to 20 “shooting stars” per hour on the 21st (best seen early on the 22nd).

Clear skies and happy stargazing!
Margaret & Ian

continued from page 9

brown dwarfs are often called, is also surrounded by a flat disk of dust that may eventually clump into planets. (Note: This brown dwarf discovery was made by a group led by Kevin Luhman of Pennsylvania State University.)

Although actual planets have not been detected (in part because of the stars’ great distances), the spectra of the hypergiants show that their dust is composed of forsterite, olivine, aromatic hydrocarbons, and other geological substances found on Earth.

These newfound disks represent “extremes of the environments in which planets might form,” Kastner said. “Not what you’d expect if you think our solar system is the rule.”

Hypergiants and dwarfs? The Milky Way could be crowded with worlds circling every kind of star imaginable—very strange, indeed.

Keep up with the latest findings from the Spitzer at www.spitzer.caltech.edu/ . For kids, the Infrared Photo Album at The Space Place (spaceplace.nasa.gov/en/kids/sirtf1/sirtf_action.shtml) introduces the electromagnetic spectrum and compares the appearance of common scenes in visible versus infrared light.

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

*on the cover***Joe Carr****Eclipse at Jalu South Camp, Thursday, March 30**

We have returned from the Jalu South Camp through Benghazi to Tripoli. The eclipse was a tremendous success, with the weather being absolutely perfect. Our RASC group arrived the day before the eclipse and claimed our tents in the Sahara Desert at the camp. There were perhaps 500-1,000 people at our camp, and I could see at least two other camps nearby. Everyone was pretty excited to finally be at our destination .

After some supper, most of us adjourned to a coffee shop setup in the desert, and shot the breeze for awhile, then retired to bed. We were all tired after being on the road in the bus for 8 hours. Along the way down, we went through multiple check points. Security has been high for this trip - we have a Tourist Police aboard our bus at all time, as well as our Numidia Tours guide and our driver. The Libyans are taking no chances of any “tourist incidents” happening for this Solar Eclipse event!

The following morning, everyone was well-rested and ready to go. First thing was equipment checks and setup. We had lots of curious Libyans and fellow campers (from around the world) asking us questions about ourselves, our equipment, and (in the case of the Libyans) what we thought of their country. The atmosphere was very energized, and we had two weathermen with us, as well as a half dozen experienced eclipse chasers who I found personally very helpful.

As we counted down to First Contact, people were really getting excited. Finally, “first contact” was shouted out, and we all looked up to see the first chunk of the Sun being eclipsed by the Moon. What a strange site! Over the next few minutes more and more of the Sun was eclipsed, until we could feel the temperature of the Saharan heat start to drop. Next came a strange change in the colour of the surrounding light. As things started to darken more, the temperature also dropped more - a total of 7 or 8°C by the end.

At Second Contact, the Moon totally eclipses the Sun, and the Diamond Ring (see my image above) appears for a brief few seconds, closely followed by Bailey’s Beads and solar flares. What a site, and it happens

continued on page 4

continued from page 3

so quickly! Then for 4 minutes we have the total eclipse to enjoy and photograph. The Sun's corona was magnificent, flowing outward from the Sun in huge streamers. I was taking photographs all through the sequence, and will have several more to share on my web site once I return home. The full eclipse phase is so strange, since no solar filters are needed to observe the Sun while fully-eclipsed by the Moon.

Too soon we came to Third Contact, where we have to again use solar filters, since the energy of the Sun is now at full strength. Some of our group observed until Fourth Contact, making observations along the way. Being less dedicated, I stopped photographing during this phase, and just enjoyed the occasional glance at the eclipsed sun through my binoculars. A solar eclipse can be enjoyed in many ways - direct observation, photography, and observing changes in the light and wildlife in the area, or just sharing the experience with others. We have a great group, with everyone helping each other to enjoy the experience. We did a fair bit of ambassadorship for Canada, the RASC, and astronomy in general - Sidewalk Astronomy in the Sahara!

web news

NASA ROLLS OUT NEW 'KIDS CLUB'

NASA has created a new online 'Kids' Club' serving up games, activities and plenty of action for future explorers. The new site features animated, colorful, entertaining and educational activities for children in kindergarten through fourth grade. Interactive games include exploring space and Mars, building and launching rockets, and helping a comet travel through the solar system. The Kids' Club site serves a dual purpose. Children can play the games at home for their pure entertainment value. Educators can use the activities as a fun way to reach students anywhere children and computers are together.

NASA's education programs motivate and engage students to pursue careers in science, technology, engineering and mathematics. For information about other NASA education programs on the Web, visit:

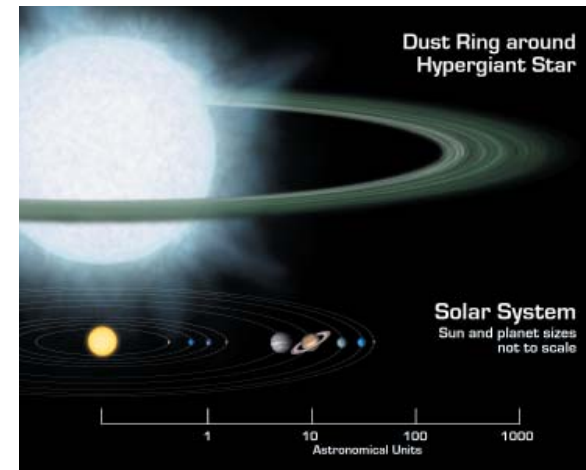
www.education.nasa.gov

astro news

Planets in Strange Places

By Trudy E. Bell

Red star, blue star, big star, small star—planets may form around virtually any type or size of star throughout the universe, not just around mid-sized middle-aged yellow stars like the Sun. That's the surprising implication of two recent discoveries from the 0.85-meter-diameter Spitzer Space Telescope, which is exploring the universe from orbit at infrared (heat) wavelengths blocked by the Earth's atmosphere.



At one extreme are two blazing, blue "hypergiant" stars 180,000 light-years away in the Large Magellanic Cloud, one of the two companion galaxies to our Milky Way. The stars, called R 66 and R 126, are respectively 30 and 70 times the mass of the Sun, "about as massive as stars can get," said

Joel Kastner, professor of imaging science at the Rochester Institute of Technology in New York. R 126 is so luminous that if it were placed 10 parsecs (32.6 light-years) away—a distance at which the Sun would be one of the dimmest stars visible in the sky—the hypergiant would be as bright as the full moon, "definitely a daytime object," Kastner remarked. Such hot stars have fierce solar winds, so Kastner and his team are mystified why any dust in the neighborhood hasn't long since been blown away. But there it is: an unmistakable spectral signature that both hypergiants are surrounded by mammoth disks of what might be planet-forming dust and even sand.

At the other extreme is a tiny brown dwarf star called Cha 110913-773444, relatively nearby (500 light-years) in the Milky Way. One of the smallest brown dwarfs known, it has less than 1 percent the mass of the Sun. It's not even massive enough to kindle thermonuclear reactions for fusing hydrogen into helium. Yet this miniature "failed star," as

continued on page 10

centre of the universe

Star Parties and Spring Hours

Star Parties have returned! Now that the weather is getting better, the Centre will be open every Saturday night from 7:00 - 11:00 pm. April's Star Party themes are:

April 15th *Zero G* - What is life like in Zero Gravity? What problems do astronauts encounter? What life is like for the astronauts in space?

April 22nd *View from the Blue Planet* - All that we know of the universe comes from looking out into the cosmos from our lonely blue planet. Let us take you on an exploratory journey of the cosmos and find out where our beautiful blue planet fits in to the grand scheme of things.

April 29th *Canucks in Space* - Learn about the history of space exploration and the role that Canadians have played!

TRIUMF Lecture Series

Canada's national nuclear and particle physics research laboratory is TRIUMF, the Tri-University Meson Facility. Located near the UBC campus, it is a world leader in the area of high energy physics. The CU is proud to present via video conference the TRIUMF lecture series. The lectures will be open to all free of charge - priority seating will be given to high school students. **April 22, 10:00 am -12:00 pm.**

We are all stardust: Nuclear physics in the cosmos - Barry Davids
History of Canadian Nuclear physics - Erich Vogt

The Sky This Month

April 13	Full Moon (9:40 a.m.) Spica 0.3° S of Moon
April 15	Jupiter 5° N of Moon
April 17	Antares 0.2° N of Moon. Mars 0.7° N of M35 (Star cluster)
April 18	Venus 0.3° N of Uranus (5:00 a.m.)
April 20	Last Quarter Moon (8:28 p.m.)
April 22	Lyrid meteor shower peak . Jupiter < 1° from the Moon
April 24	Venus 0.5° S of Moon (early morning near dawn)
April 27	New Moon (12:44 p.m.)
April 29	Moon 0.2° N of Pleiades (M45)

Go outside once the Sun has completely set and you'll find the two kings of our solar system dominating the southern skies: Jupiter in the SE and Saturn in the SW. Saturn is particularly impressive as its rings are tipped 20° from edge on, casting a noticeable shadow.

Looking to the west, many constellations we have been enjoying all

continued on page 10

contact us on-line

Web Site: <http://victoria.rasc.ca>

Victoria Council Members:

president@victoria.rasc.ca
 vp@victoria.rasc.ca
 treasurer@victoria.rasc.ca
 librarian@victoria.rasc.ca
 nationalrep@victoria.rasc.ca
 newmembers@victoria.rasc.ca
 web@victoria.rasc.ca

General Enquiries:

info@victoria.rasc.ca

sales@islandeyepiece.com
250-743-6633

Island Eyepiece and Telescope Ltd
 Mill Bay, BC, Canada
 Canada's Source for Astronomy since 1995

TeleVue, Coronado, Meade, Celestron
Howie Glatter
Lumicon, Helix
Antares, Telrad
Sirius Optics
Vixen, Orion
William Optics
Sky-Watcher
Denkmeier, ScopeTronix, JMI, Rigel



Celestron
SkyScout

*Innovative
New Product*

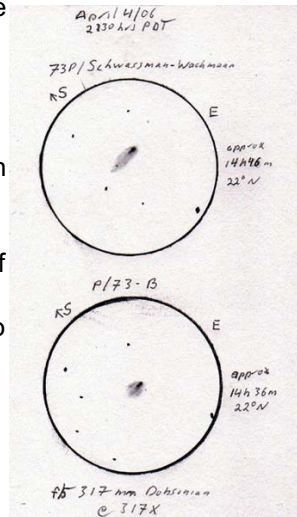
www.islandeyepiece.com
 Shipping to Canada, USA and International

*observers Group***Bill Weir**

Over the past week I've had a chance to observe this interesting periodic comet a total of three times. It returns approximately every 5yrs. In 1995 it fractured into three components that now travel around together. They are separated from each other by a couple of degrees. At present the two brightest parts (B & C) are quite easily visible telescopically as they travel through Bootes heading towards Hercules. If you want to read more about them all sorts of information including a very accurate finder chart is available here <http://www.skyhound.com/sh/comets.html>

Even with the bright Moon on the 5th I was able to find them both quite easily with my 6" dob. The night before I'd observed them with my 12.5" dob but was just faintly able to spot them with it's 12X80 mm finder. I'd estimate them both to be between 9th and 10th magnitude. The attached sketch I did using my 12.5" dob at 317X. Their movement in the sky was quite apparent over the period of time I observed them. That star at the tip of the coma in the top sketch was close to the pseudo nucleus 1.5 hrs earlier.

I hope others get the chance to observe them or even better yet get a nice widefield shot. I've seen one and they both show up quite well.

**John MacDonald**

I am writing this in an internet cafe on the island of Santorini in Greece. My attempts to get to the one Greek Island that was in the path of the total eclipse did not bear fruit and I had to settle for viewing a partial from this island.

It was mainly cloudy on the 29th when the eclipse was on but there were periods of thin cloud that allowed me to get most of the phases. Even though it was not total I found the experience of seeing the moon cover our star fascinating.

One interesting thing about it was that the eclipse seemed to worsen the

cloud as it progressed. Prior to the start, the sun was burning through the muck but that reversed as the sun was covered. Can't send you any shots now as they are in raw format in my camera and I don't have access to a program to translate them to JPG.

Dana Thompson & David Chapman

For those interested in the lunar X feature, these pictures were taken on 2006-03-07 by Dana Thompson of Hebron, Ohio, and processed by Dave Chapman of Dartmouth, Nova Scotia.
<http://homepage.mac.com/chapmandave/LunarX/PhotoAlbum106.html>

Ed Majden

I coordinate the efforts to track down fireballs observed over B.C. and the Pacific North West. Dr. Jeremy Tatum, sometime ago, set up a network of volunteers that would go out and interview observers of such an event and take the necessary instrumental, (compass, clinometer, etc) measurements. As time passes this network has crumbled so we are looking for volunteers interested in joining our group. Sadly, this is a non paying job and you must provide your own equipment. The satisfaction is your contribution to meteoritics.

Our network consists of two Sandia All-sky patrol cameras on Vancouver Island along with volunteer interviewers. We hope one day to get lucky and perhaps recover a meteorite. A difficult task because of our rugged terrain but if you don't do this one will never be found.

Please contact me if you are interested in joining this effort.
<http://members.shaw.ca/epmajden/index.htm>

address change? information incorrect

Contact the National Office

Telephone - 416.924.7973 or toll-free in Canada 888.924.RASC

Fax - 416.924.2911

Email - mempub@rasc.ca

Post - RASC, 136 Dupont Street, Toronto, ON M5R 1V2

General enquiries - nationaloffice@rasc.ca