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.

Sunday Sun Day

As part of his day job as a CRD Parks Naturalist, Scott Mair will be hosting a Sun observing event at the **Gonzales Observatory from Noon - 2 pm, June 18th**. Any RASCals that would like to bring their solar filters and telescopes and join in are very welcome.

Royal Astronomical Society of Canada ✦ Victoria Centre

skynews

this month

Chris Onken
The Widespread Influence of Supermassive Black Holes

Wednesday, June 14, 7:30pm, Elliott Lecture Theatre, Room 060, University of Victoria

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.

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on the cover

Spirit Beholds Bumpy Boulder

As NASA's Mars Exploration Rover Spirit began collecting images for a 360-degree panorama of new terrain, the rover captured this view of a dark boulder with an interesting surface texture. The boulder sits about 40 centimeters (16 inches) tall on Martian sand about 5 meters (16 feet) away from Spirit. It is one of many dark, volcanic rock fragments -- many pocked with rounded holes called vesicles -- littering the slope of "Low Ridge." The rock surface facing the rover is similar in appearance to the surface texture on the outside of lava flows on Earth.

Spirit took this false-color image with the panoramic camera on the rover's 810th sol, or Martian day, of exploring Mars (April 13, 2006). This image is a false-color rendering using camera's 753-nanometer, 535-nanometer, and 432-nanometer filters.
For up-to-date infromation on the status of both Mars Rovers see:
http://marsrovers.jpl.nasa.gov/home/index.html

Royal Astronomical Society of Canada ✦ Victoria Centre

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New Member Liaison
Sandy Barta
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this month
monday nights

Astronomy Cafe
See you again in September

second wednesday of the month

Monthly Meeting
7:30 PM, Elliott Lecture Theatre, Rm 060, UVic
NOTE: no meetings in July and August

as sky and interest dictate

New Observers Group
Hosted by Sid Sidhu
1642 Davies Road, Highlands
Call 391-0540 for information and directions.
Note: no meetings in July and August

by email

Observer/CU Volunteers/ Members email lists
Contact Joe Carr to subscribe to these email lists for important, timely, member-related news.

astrophotography continued

Guy Walton *Moon taken with A Nikon D50 at ISO 800 on anOrion 100mm, f9 ED refractor.*

Charles Bainville *M81 and M82*
Telescope: Televue NP-101 f/5.4 on Vixen GP-DX
Camera: Canon 20Da
Exposures: 30x90 sec @ISO 800 processed with Images Plus

John McDonald *Jupiter's Great Red Spot May 9th*
Telescope: WO 105 mm plus Powermate 2.5x
Camera: Pentax ist-DS at Prime focus
Mount: HEQ5
Exposure: Each image Combination of 30 exposures at 1/20 sec, ISO 400
Processing: Images Plus and Photoshop

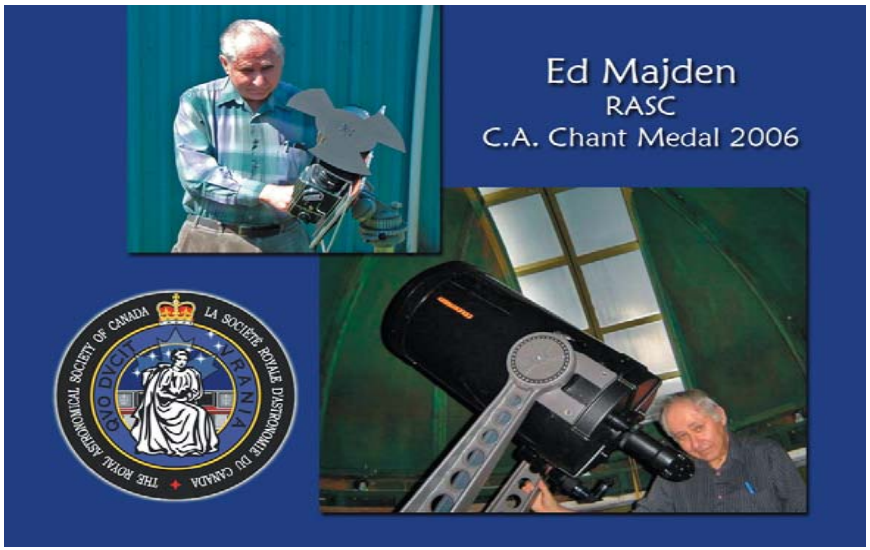
Chant Medal

CHANT MEDAL ACCEPTANCE SPEECH

by Ed Majden

I would like to thank the RASC for recognizing my long term involvement in meteor spectroscopy and awarding me the C. A. Chant Medal. This was indeed unexpected and a very pleasant surprise. I do hope I can live up to the standards of this award set by previous recipients. I must apologize for not being able to attend the GA in person, health problems

My interest in astronomy began when I became a member of the Regina Astronomical Society as a very young student, back in 1953 if I recall



correctly. The RAS was very active conducting visual meteor observations at this time in support of Peter Millman's meteor programs. Great fun counting meteors, estimating magnitudes, and shower associations. At this time the RAS was also building a very nice domed observatory for a 4 inch Brashear refractor. The observatory was completed in 1955 and Peter Millman presided at the official opening. This is when I met Peter and after many years we became good friends.

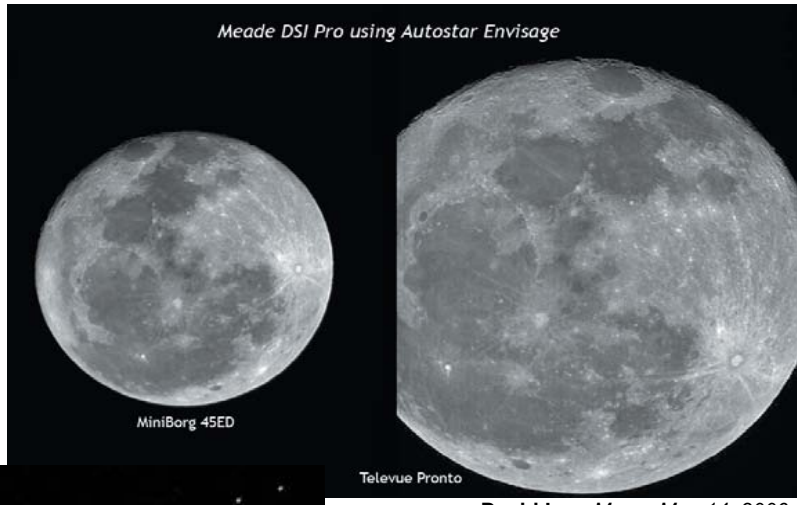
The guiding light of the RAS was the late John V. Hodges, later director of the RAS Observatory. John had an objective prism that he used on

an old tourist camera to try and obtain meteor spectra. As luck would have it, the first success came during the Perseid Shower in 1955. This was recorded as Spectrum Number 187 on Peter Millman's World List of Meteor Spectra. The second success came the following year 1956, recording Spectrum Number 201 on the World List. At this time meteor spectra were few in number so any spectrum was considered important. Canada was a major contributor to the World List during this period under the directorships of Peter Millman and Ian Halliday. This is when the bug hit me. As secretary of the RAS in 1956 I helped organize a Province wide meteor observation program called Operation Perseid which was reported in the JRASC. We had several stations set up across the Province all connected by amateur radio. I was also the RAS Meteor Reporter for I.G.Y. in 1957/58. John adapted his prism so it would fit an old Olympus camera that I owned. I tried in vain to capture a spectrum with this set up but was sadly unsuccessful. My technique was correct but it is not easy to record a spectrum since the setup was only sensitive to meteors brighter than minus magnitude 2 and brighter. I still kept trying!

After high school I enlisted in the RCAF and was trained as, what was then called an Armament Systems Tech, later called Radar Systems. I became an armchair astronomer at this time because of service commitments and frequent moves etc. My interest in meteor spectroscopy peaked again when I read a paper by Professor John A, Russell in Sky & Telescope in 1969. He was using a surplus F-2.5 Kodak Aero Ektar Lens fitted with an objective prism to record meteor spectra, He was especially interested in the Auroral Green Line of OI at 5577A that was first identified by Ian Halliday in 1958. I decide to try and find an objective prism by placing a wanted ad in Sky & Telescope. In due course I was contacted by an individual that said he had a large prism that should work. When it arrived, it was not exactly what I was looking for. It was a large surplus 60 degree prism of very dense flint glass of questionable quality. I mentioned this to Peter Millman and he suggested I have the prism cut into two 30 degree prisms and then rework the surfaces to 1/10 wave. Not having the capability to do this myself Peter found an optical firm in Ottawa that could do this at a reasonable cost. I mounted one of the prisms on an old 4X5 Crown Graphic fitted with an Aero Ektar lens and successfully recorded two Perseid Spectra in 1972. Finally a success!

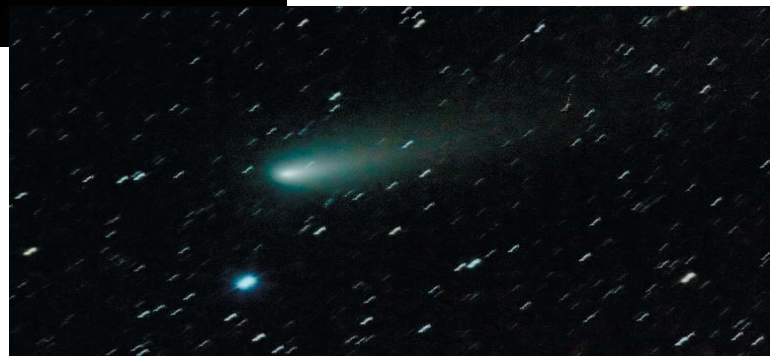
At this time I was corresponding with Ken Chilton, the then General Secretary of the now defunct I.U.A.A., International Union of Amateur As-

astrophotography



David Lee *Moon, May 14, 2006*

Guy Walton M13
Orion 100mm, f9, ED refractor on EQ4 Mount. Nikon D50 DSLR, 30 second exposures with NR Images stacked with DeepSkyStacker, processed with Photoshop 9, C2 and cleaned up with Noise Ninja.



Joe Carr - *Comet 73/P Schwassman-Wachmann, May 2nd. Canon 30D dSLR at prime focus on my Meade LX-90 SCT at f/10; exposure: 43 seconds each, ISO 1600, raw development using Canon Digital Photo Pro, 10 images aligned (on the comet head) and stacked, moderate Digital Development applied using ImagesPlus, NeatImage auto, crop and resize using Corel PhotoPaint.*

space; and final distance of 1.5 million km from the Earth. The Beauty: A chance to see the beginnings - the birth of the first stars and galaxies in the early universe, the formation of planets, and the shape of the universe. Move over, Hubble - meet James Webb!

Sky This Month - June 2006

June 3 First Quarter Moon (4:06 p.m.)
June 5 Saturn 0.8° S of Beehive Star Cluster (M44)
June 7 Spica 0.1° S of Moon (1:00 a.m.)
June 10 Antares 1° N of the Moon
June 11 Full Moon (11:03 a.m.)
June 18 Last Quarter Moon (7:08 a.m.)
June 21 Solstice (summer begins @ 5:26 a.m.)
June 23 Venus 6° S of Moon (Early dawn)
June 25 New Moon (9:05 a.m.)
June 27 Moon, Mars, Saturn and Mercury are together low in the west (9:45 p.m.)

MORNING PLANETS Venus is for the early birds! Rising less then 2 hours before the Sun, it is visible during early morning twilight very low in the east-northeast.

EVENING PLANETS Jupiter is the lonely nightfall planet out shining all the rest while standing 30° high in the south-southeast after sunset. Saturn, Mars and Mercury are all found low in the west-northwest during evening twilight, and all set less then 3 hours after the Sun. Keep a close eye out towards the end of the month when this trio lines up with the Moon.

THE MOON June's Full moon is called the Full Strawberry Moon according to the Algonquin people. This is the time of year that the people would set out to harvest wild strawberries. In the Wsanec (Saanich) calendar the June full moon is known as the Centeki or Sockeye Moon. June on the west coast marks the return of the Sockeye salmon to the straits. The Sannich people fished for sockeye in the straits instead of waiting for the river run. This gave them a trading advantage of one month. In this time they were able to catch a brighter colored, higher quality salmon.

Clear skies and happy stargazing!
Ian & Margaret

tronomers. He suggested that I try and get others interested in meteor spectroscopy and put me in contact with Karl Simmons from the American Meteor Society and publisher of their newsletter Meteor News. I wrote a paper on the methods and also reported my successes. Unfortunately there were few takers as most did not want to spend the money on an objective prism or the more preferred precision blazed transmission grating. After the demise of the I.U.A.A. I was contacted again by the American Meteor Society to set up a similar program for them. This has also met with limited success but I still keep trying.

Back in the late 1960's and early 1970's I read about the efforts to record the spectra of fainter meteors. Gale A. Harvey from NASA/LRC had some large aperture very fast Maksutov spectrographs deployed and he recorded a large number of meteor spectra to about magnitude +3.0 or so. Also at this time A. F. Cook, Peter Millman and others were experimenting with Low Light Level TV techniques to record fainter spectra. A very interesting advancement in this field but too expensive for amateurs in my income bracket. Later image intensifiers were developed for the military for night vision purposes. Surplus 2nd Generation Intensifiers hit the surplus market and some meteor types were using these for astronomical purposes, i.e. recording faint meteor trails. I considered this and then thought, why not mount a transmission grating on one to record meteor spectra. Some professionals were already doing this. I picked up a surplus 2nd Generation Intensifier that was classed experimental grade from an American surplus firm for $199. I put together an experimental set up using a fast 35mm camera lens, a transmission grating and a video camera to record the images on VHS tapes. Success came when I started recording Perseid spectra with this set up in 1999. I did a short presentation on this at a MIAC meeting in Edmonton. Actually this was rather amusing. I did not shield the green glow of the image intensifier screen and this attracted night time insects. At the presentation I told the MIAC members to keep close watch for a UFO which I referred to as a UFB. A little creature appeared walking across the video screen

and very conveniently got out of the way as a Perseid spectrum was recorded. Jeremy Tatum identified the UFB as an earwig and everyone had a good laugh. Bob Hawkes asked for a copy of the tape so he could present it to his students. This system recorded spectra to about magnitude +3 or so. I used it for the 2001 Leonid Storm and recorded 110 meteors with this system, 60 zero order images and 50 first order spectra. These are now in Peter Jennisken's NASA/SETI archive which I hope will be useful in the future. Jiri Borovicka from the Czech Academy of Sciences and Ondrejov Observatory measured one of these spectra and it is posted on my web page.

David Lee accepting the chant Medal on Ed/s behalf

I have also experimented with the use of inexpensive thin film holographic gratings in order to lessen the cost of doing meteor spectroscopy. This was reported in the JRASC. The value of using these inexpensive gratings is still questionable, as they are not as efficient as a precision blazed replica grating and the photometry is not established at this time. So far I have recorded 17 meteors of varying quality with my film based spectrographs. My best one, secured in 1986 was published in the JRASC as a joint paper with Jiri Borovicka.

I hope to continue doing this as long as I can. Each year, it is becoming more difficult to do from my backyard observatory because of light pollution etc but I still think it is worth doing and I will continue as long as it remains fun and is useful in a minor way to the science of meteoritics.

Thank you again for presenting me with the Chant Medal.

Ed Majden
Victoria Centre RASC

centre of the universe

Summer officially starts this month, and the CU has switched to its summer hours. We are open 3 - 11 pm seven days a week, with Star Parties every evening.

June's Star Party Themes

May 29 - June 4: Salute to the Solar System

Take a journey through our planetary neighbours as we salute the Solar System! Learn interesting facts about all the planets and where to find them in the sky.

June 5 - 11: Bad Astronomy

Astronomy is everywhere, including our favourite TV shows and movies. Come take a look at the good, the bad and the ugly astronomy presented in pop culture.

June 12 - 19: CU 5th Birthday Celebration!

Join us in celebrating our 5 year anniversary and the 88th year of operation of the Plaskett telescope. To commemorate this event, we will be looking both forwards and backwards - at the tremendous achievements and the exciting future of astronomy. And it's all done right here in your backyard! With special events and surprise guests, we look forward to seeing you!

June 19 - 25: Aboriginal Week

Celebrate the solstice and National Aboriginal Day with a look into the star stories and legends of local aboriginal people.

June 26 - July 2: Beauty and the Beast

The Beast: 6800 kg; 18 mirrors linked to form one 7.5 times the size of Hubble's; operating temperatures of -220oC; a 3 month journey through

continued on page 8

address change? information incorrect

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