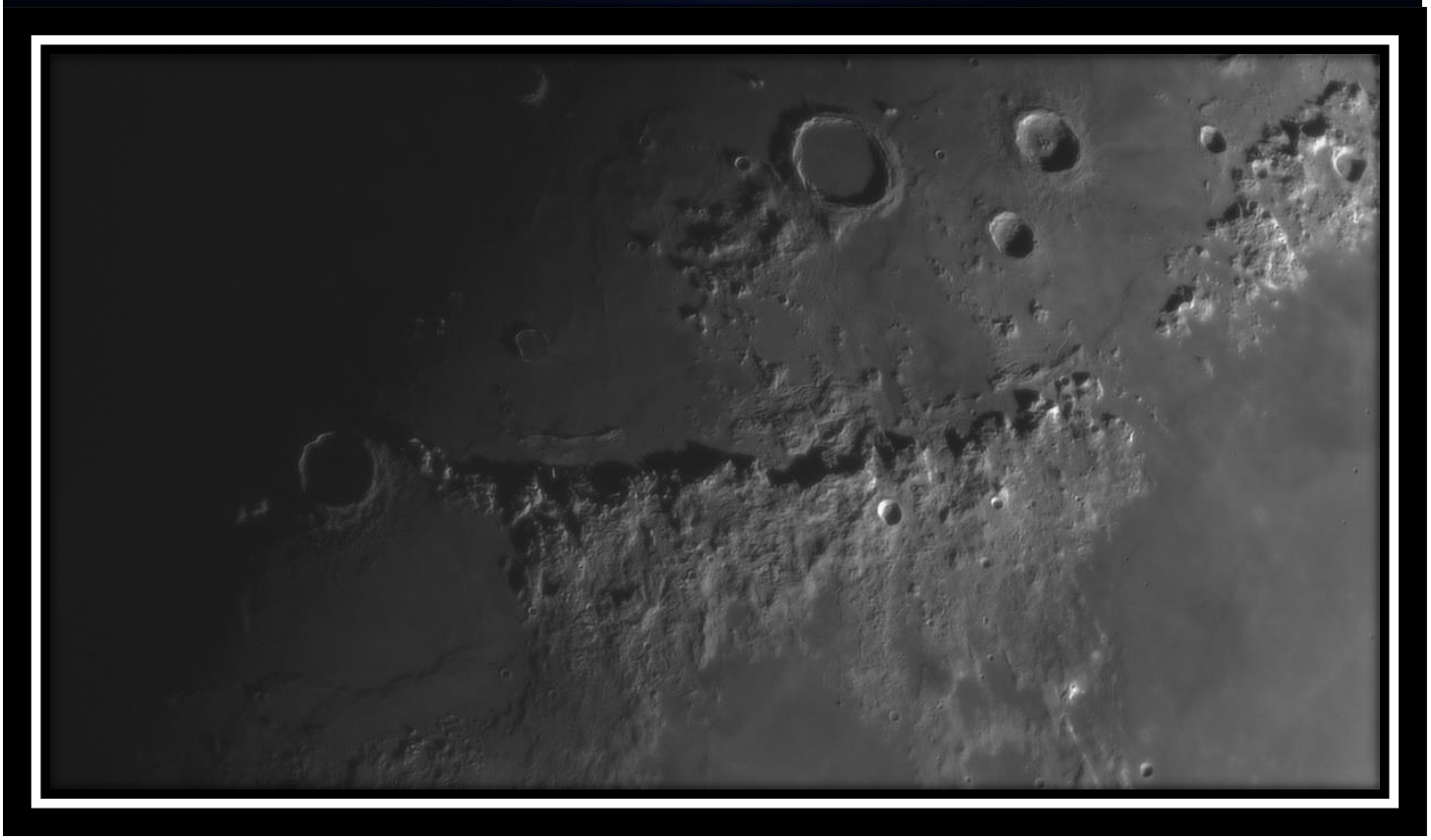
SKYNEWS



Moon in Daylight by IR (featuring Archimedes Crater in Mare Ibrium), May 19, 2021 by Mike Nash

A Report from Astronomy Day

International Astronomy Day was celebrated this year on May 15th but looked quite a bit different than it has in previous years. How many of you remember being on the lawn at St. Ann's Academy a long time ago or in the lobby of the Bob Wright building at UVIC? For years the event was hosted at the Royal BC Museum, with presentations in the auditorium; solar telescopes out on the plaza; and the Solar System display winding around the grounds. There were children creating in the Astro Kids Centre, messy experiments with Science Venture, *Ask an Astronomer* tables, astrophotography displays, mirror grinding demonstrations, and friends from so many different science organizations sharing space in Clifford Carl Hall. And, for the last few years, we finished off the evening up at the Centre of the Universe, looking through telescopes and enjoying the Plaskett Telescope tours. Months of planning by many RASC members, clocking in dozens of volunteer hours, and tired teams at the end of the days were proof of our Centre's exceptional effort in public outreach each year.

But this year we had to pivot from our usual plans and look to how we could still celebrate International Astronomy Day but do it virtually. Thanks to members from both the RASC and the Friends of the DAO, I think we put on a pretty good show, all things (such as the inevitable technical glitches) considered.

The FDAO had been putting on virtual star parties once a month since last fall, so we decided to combine IAD with the Star Party for May. Randy Enkin and Aaron Bannister were our on-air personalities, with FDAO's Calvin Schmidt and a small team of technical wizards keeping the IT going on from behind the scenes. We hosted over 200 people on the RASC National Zoom webinar account and also on the FDAO's YouTube account, with visitors joining in locally and from other provinces across Canada.

We started the program at 7pm with Sid Sidhu, Chris Purse, and David Lee live streaming views of the Sun (complete with sunspots and prominences) using the new 90mm Coronado up at the Centre of the Universe. Sid's computer decided to crash about 15 minutes before we started streaming, but David Lee saved the day with a fast connection to his laptop. Thanks David!

Our special guest presenter was Dr. Kim Venn, Professor of Physics and Astronomy and Director of the Astronomy Research Centre at UVIC. Kim gave her talk on *Fossils in our Galaxy*: *metal-poor stars that were formed early in the evolution of the Milky Way*. The way she was able to easily communicate a fairly complicated astronomical topic to a general audience was impressive.

After the guest speaker, Karun Thanjavur (from UVIC) gave a virtual tour from the University's Observatory. For many people in the audience it was the first time they had seen what the telescope looked like and they were shown the kind of presentation programs that UVIC students were able to present during Wednesday online open houses.

Bodes Galaxy (M81), imaged on May 9, 2021, by Lucky Budd

Next, there was a special astrophotography audiovisual project, initiated by Marjie Welchframe and David Lee, composed of images that were taken by members of the RASC Victoria Centre. Set to music composed by Jeff Enns and performed by the amazing Vox Humana choir, the series of deep sky photos, nightscapes, and sketches added a quiet, moving interlude, weaving story, image, and music together into the program. Thank you, Marjie and David for your vision and design.

Our youngest member in the Centre was put on centre stage as one of our *Ask an Astronomer* presenters. Nathan Hellner-Mestelman, along with UVIC's Jason Beaman, fielded questions from the audience with aplomb. It's hard enough to answer questions on the fly on astronomical topics, but to do it when you are only 13 years old? Amazing. Thanks to Amy Archer for hosting this segment of the program.

On a usual IAD star party we would invite visitors into the planetarium at the Centre of the Universe to take in stories under the stars. With the planetarium in the process of being upgraded during the pandemic, it was not available, but our master storyteller, Aaron Bannister, delivered his exciting version of the drama between Hercules and Draco under spooky ultraviolet light with his unique, hand-made constellation blanket.

One of the highlights of any of the evenings up at the DAO is night sky viewing, both with the historic Plaskett Telescope and observing through members' telescopes from the deck of the CU and the parking lot. In planning for the IAD we wanted to see if we could reconstruct these experiences. Thanks to Dan Posey and Ben Dorman, we were able to show images, for the first time in many months, from the Plaskett. It was so good to see it being used again for the public. And after many hours of planning and practice the live streaming premier of the EAA Group led by David Lee, with Brock Johnston and David Payne from Maple Bay, showed off just how effectively electronically assisted astronomy streaming could be used for public outreach from remote locations. The narration of the images forming before our eyes was excellently researched and presented by Ruhee Janmohamed from UVIC.

As you can see, even with a virtual International Astronomy Day, it still took a dedicated team of on-air presenters, behind the scenes volunteers, social media gurus, and the amazing collaboration between the RASC and the FDAO to make this event happen. Many thanks to everyone who had a hand in IAD for 2021, but a very special thank you must go out to David Lee (mentioned here leading in so many ways) for all the work and time he put in for this to be a success.

I sure hope though, that we can be all together, live and in-person for next year's IAD in 2022.

Lauri Roche

Editorial Remarks

One of the best *Western* series ever written is the six part story of the Oregon Trail by AB Guthrie Jr., a work of historical fiction that covers the setting from the intrusion of the early mountain men, to the coming of the settlers, to the destruction of the wilderness paradise that brought the migrations west and the end of an era. It's a raw and often unpleasant look at the footprint of settlers, closer in tone to the more recently published *The Englishman's Boy* by Guy Vanderhaeghe, than the *romance as western* of Louis L'Amour. The first of the series is *The Big Sky*: a jarring coming of age story of a flawed young man. Coming into contact with all sorts of disreputable characters, as he travels further into an alien wilderness, he comes to prefer the alien wilderness over most of the people he meets along the way, even as he becomes one of those disreputable characters himself. It's a novel with the setting as character and in truth the setting is the character you'll likely feel the most affinity to.

Even crowded in by trees, hills, and condos, we're all still seeking those big skies overhead; made bigger when the clouds part to give us the chance to view the Universe beyond. Like coming into contact with an alien wilderness, the star fields and constellations of the night sky bring us face to face with the profound. More than ever before, in recent years the romance of the *Western* genre has had to come to grips with the uglier realities of colonization all around us. With increased development and the light pollution it brings, more than ever we're on the hunt for what remains of the wilderness of Vancouver Island and as lone observers with telescopes we're still drawn to the big sky.

In this issue of *SkyNews*, we have a short article on solar winds by Natasha van Bentum, a fifty year anniversary of an astronomy image taken by a member of RASC Victoria while posted in Antarctica, more recaps from our Centre's activities, as well as all the astrophotography and articles you've come to expect from the *Victoria Centre SkyNews*.

Bruce Lane: SkyNews Editor

President's Message for June

In praise of our Astro Cafe

Every Monday evening at 19:30, the Victoria Centre runs the Astro Cafe on Zoom. I look forward to it every week! Much of our time as amateur astronomers is spent alone and I suspect that is considered a feature of this hobby by many. But we also like to share our accomplishments and problems. While we are isolated by the pandemic, Astro Cafe brings our community together.

I had been a regular contributor since I joined the Victoria Centre three years ago. Now that you have made me president, I feel that part of the job is to think of something to contribute each week. I try to riff off of some recent astronomical event, for example the summer solstice for our June 21 Astro Cafe. I am particularly excited about linking current astronomical work to the centuries and millennia of astronomers from the past, who figured out so much of how our universe works without the advantage of all the recent technologies and research.

The Astro Cafe also helps us advertise events and opportunities. It provides our members a forum to present their recent, or not so recent, work. I particularly enjoy the discussions, as we learn from each other. We have such a wide variety of specialties and levels of expertise to learn from. Our community is refreshingly supportive and non-judgemental. Everybody should consider making a presentation. If you read something that you found interesting, share it! If you feel proud of an observation, sketch, or photo, share it! If you have an astronomy question, ask it!

Special thanks go out to Chris Purse who masterfully organizes and leads the discussion each week, and to Joe Carr who curates the Astro Cafe videos onto Youtube.

Look Up,

Randy Enkin, President@Victoria.RASC.ca

Special Interest Group Reports

Getting Started in Astronomy SIG

This SIG is led by David Lee (*david@victoria.rasc.ca*) and meet via Zoom on the 1st Tuesday of each month, at 7:30pm. We continued talking about the capabilities of different types of telescopes. Last SIG we compared the capabilities of two classics, the 6" Dobsonian and the Celestron C8. In particular, we talked about the versions that were available in the late '80s to early '90s. Next, we will be examining a member's quest for a good quality GoTo system that is portable, as well as easy to set up and use.

Astrophotography SIG

This SIG currently is led by John McDonald (*john@victoria.rasc.ca*) and meet via Zoom on the 4th Wednesday of each month, at 7:30 PM. The Astrophotography SIG continues to work on imaging challenges, despite weather and the shortage of truly dark imaging hours. We also have an active chat group that is being used to share images and answers to questions raised. This month, members have been working on the Pinwheel Galaxy (M101).

Electronically Assisted Astronomy SIG

This SIG is led by David Lee (*david@victoria.rasc.ca*) and meet via Zoom on the 1st Thursday of each month, at 7:30pm. The EAA group has been busy working on material for the FDAO Summer Virtual Star Parties. We've had a number of successful and entertaining sessions, with imagery from members and narration from the UVIC Open House facilitators. With the lack of dark hours we are currently working with pre-recorded material.

Makers SIG

This SIG is led by Jim Cliffe (*jim@victora.rasc.ca*) and meet via Zoom on the 3rd Thursday of each month, at 7:30pm. The Makers group continues to meet about projects that members are working on. Topics have ranged from modifying telescope mounts, building telescope interface cables, to observatory restoration.

David Lee and John McDonald

Fifty Years Ago

I was hired by McDonnell-Douglas Astronautics Corp. as operator of their one-man facility for one year. The purpose of the facility was to monitor the near-Earth solar wind flux, by observing the opacity of the ionosphere to the background radio emission from the galaxy at 30 and 50 MHz. There were also two auroral photometers and a magnetometer.

I lived and worked alone in a semi-cylindrical building, with one room for the equipment and another for the living quarters. It was about a half-hour walk from the main base, behind a hill to avoid light and radio interference (*seen left*).

This was an amateur astronomer's paradise. With the South Celestial Pole being only 12 degrees off the zenith, the entire southern sky could be viewed every clear day for the 4 months of 24-hour darkness. You could see the Southern Cross overhead, with the prominent Coal Sack nebula beside it. Sometimes, the entire sky would be covered with a dazzling aurora. One of the other civilian scientists hand-carried his 6" aperture, f/8 reflector to the Ice and brought it up to my place one day. Before we could view anything of note, the eyepiece fogged over in the minus 50 degree cold. Toward the end of the winter, I was actually sad when twilight began to appear on the northern horizon.

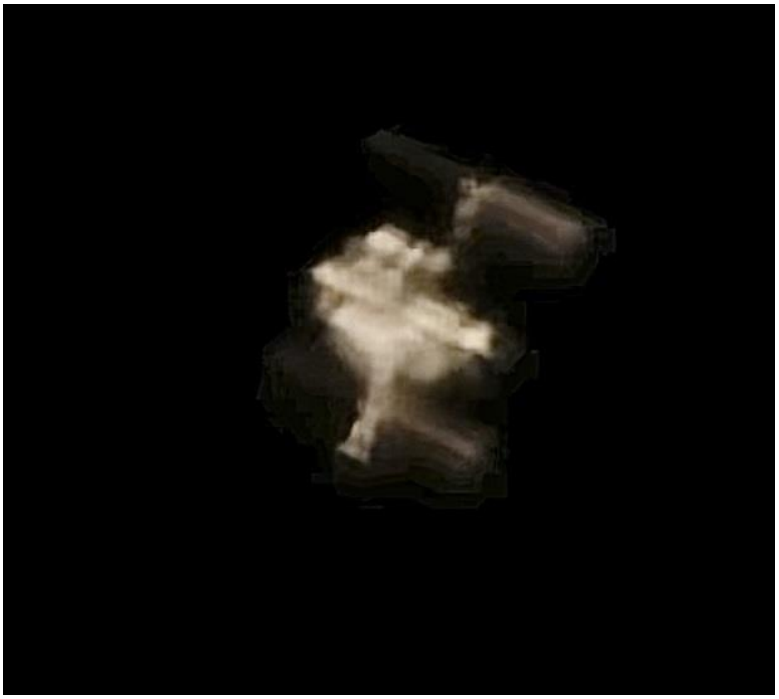
Jim Stilburn

Antarctic Sky (featuring Orion), June 1971, by Jim Stilburn

Astro Café: Continues Online

The weekly social gathering of amateur astronomers on Monday nights, known as Astro Café, is now online. As with many groups, we're trying to find ways to still function as a Centre, without meeting in person. Members are posting their astrophotography, short articles, as well as links to astronomy stories from the Internet. Sadly, you'll have to make your own coffee and the only cookies are those your browser picks up when you visit our website. You can access the *Virtual Astro Café* at: https://www.victoria.rasc.ca/astronomy-cafe/

The first Astro Café of May was hosted by Chris Purse, with an update on the RASC National registration system. The special guest of the evening was Blair Stunder, from RASC Prince George and Chair of the RASC National Observer Committee. Chris had his Explore the Universe certificate presented by Randy Enkin, Chris expanded on the topic of RASC National Observer Programs. Laurie discussed the upcoming Astronomy Day on May 15th; Dave Robinson showed some astrophotography images from RASC Edmonton and talked about the perigean spring tide (*Ed. also known as the king tide*); Randy shared an astronomy themed web comic strip by XKCD; and David Lee discussed the Special Interest Groups and talked about variable star observing.



For the second Astro Café of the month, Randy showed off a pocket sundial; Lauri Roche talked about International Astronomy Day, Science Odyssey (Plaskett virtual tour), and the Creation Station (interactive STEAM site for kids); Chris Gainor gave a report from RASC National and discussed the RASC General Assembly 2021 (June 25-28); David Lee talked briefly about spectroscopy and the upcoming NightScaper virtual conference; and Dave Robinson showed some more astrophotography images from RASC Edmonton.

The next Astro Café was mostly a review of the events of Astronomy Day, from a couple of days earlier. Nathan also showed his image taken of the ISS passing in front of the Moon (*seen left*) and went into detail about how he took the photo. Tom Field was the guest of the evening, speaking from Seattle, and gave an enthusiastic and detailed presentation on Spectroscopy using RSpec.

After taking Victoria Day off, the last Astro Café of the month was on May 31st. The meeting started off with a discussion about CRD lighting of Galloping Goose Trail; Cameron Burton and Lisa Meister gave a detailed presentation on *Moving and installing Bill Almond's observatory*; Randy Enkin talked about the upcoming Lunar Eclipse; Dave Robinson discussed the Edmonton Centre's new observatory and showed some of their images; and David Lee gave an update on the upcoming Special Interest Groups meetings for that week.

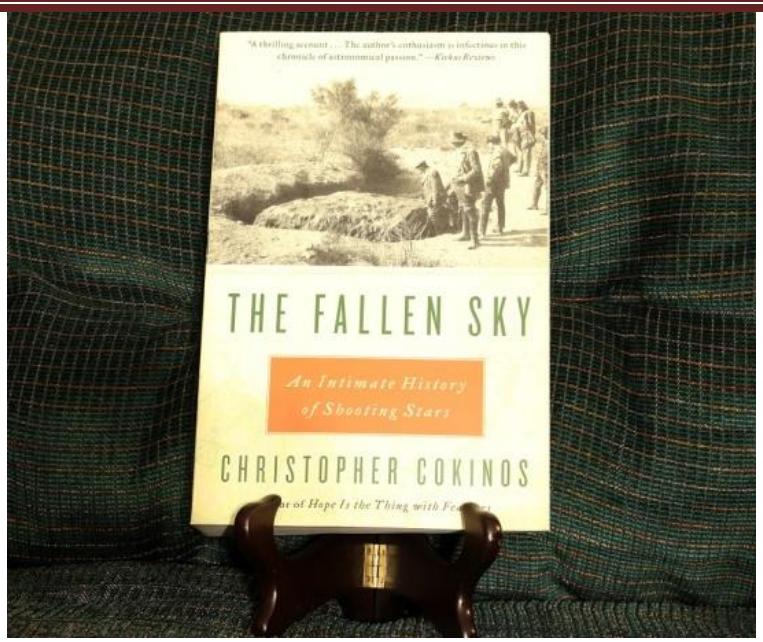
Bruce Lane

From the Library

The RASC Victoria Centre Library is housed in the Astronomy Department's faculty lounge, located on the 4th floor of the Elliott Building, at the University of Victoria. It contains over 500 titles, curated by Alex Schmid, our RASC Victoria Librarian. Alex is currently running our library in the same way the Greater Victoria Public Library runs its shut-in branch, driving around to do deliveries and pickups for our membership to provide access to books from the collection. For more information and to make a book delivery request, please contact Alex Schmidt at: *librarian@victoria.rasc.ca*

Our library covers many aspects of astronomy: observing, astrophotography, telescope construction, space exploration, astrophysics, and much more. Normally, the library is opened up during the social gatherings in the faculty lounge, after our monthly meetings, with coffee, juice, and cookies provided by our Centre. In the past, I've been doing book reviews of the contents of our Centre's library, but until the resumption of our monthly meetings at the University of Victoria, I'll be doing reviews of the astronomy books from my personal library, ones that can be purchased online or better yet at your local bookstore.

This month we're taking a closer look at *The Fallen Sky*, by Christopher Cokinos. When not employed as a post-secondary professor, Christopher Cokinos is best known as a naturalist writer for various publications (including *Sky & Telescope* and the other *SkyNews*) and was also the editor of *Isotope: A Journal of Literary Nature and Science Writing*. He did a two year term as the president of the Kansas Audubon Council and is currently member of the Institute of the Environment. Cokinos is currently employed as an associate professor of English at the University of Arizona. When he's not working in science journalism, as an amateur astronomer he can often be found behind the eyepiece of his 10" aperture Dobsonian reflector telescope, working on one lunar observing certificate or another.

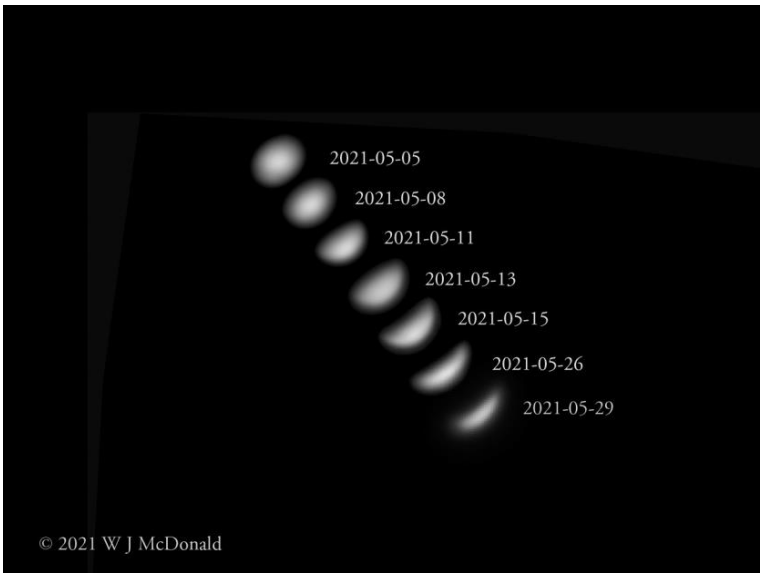


In telling the stories of various personalities and their obsession with meteors, Christopher Cokinos puts himself into the equation. As part of his research for this book he traveled to the locations of archives and farmyards, stopping to do a bit of meteorite prospecting for himself along the way. He's been on trips to both the Arctic and Antarctic in search of elusive meteorites. He tagged along with bird watchers in Greenland, following in the footsteps of Robert Peary, and spent five weeks as part of an expedition in Antarctica. *The Fallen Sky* is as much about coming to an understanding of the lesser regarded dust and rocks of our solar system, as it is about the people hunting for geological treasures that have crash landed on our planet. Above all, *The Fallen Sky* is an engaging and well written book and it's available by order from your local bookstore.

Bruce Lane

Hill and Dale (Observing on the Island)

There was certainly a lot to look forward to in May, with the lunar eclipse scheduled on the 26th. It was going to be a challenging event for the astrophotographers, due to the Moon being so close to the horizon and the accompanying particulate muck, when the eclipse was taking place. It certainly wasn't set out to be a big crowd pleaser, given that totality was well before most people get up and well after most of us go to bed. The weather reports were uncertain and certainly less than encouraging. In the end the clouds took over the early morning sky and did not let up. A few people watched the event live online and then vicariously through a stream of lunar eclipse images being shared on social media sites. We'll have another lunar eclipse in November to look forward to, so hopefully the weather is a bit more forgiving for the next one.



As seen on the cover image of the Moon in daylight, through an IR filter, by Mike Nash, amateur astronomers can always find a way around the lack of darkness during the longer days. You can expect a lot

of focus on the Moon and planets over the coming weeks; especially for those without solar telescopes. John McDonald created an image from a series of pictures (*seen previous page*) he took of Mercury, from May 5-26th, during its greatest elongation (separation) from the Sun this year.

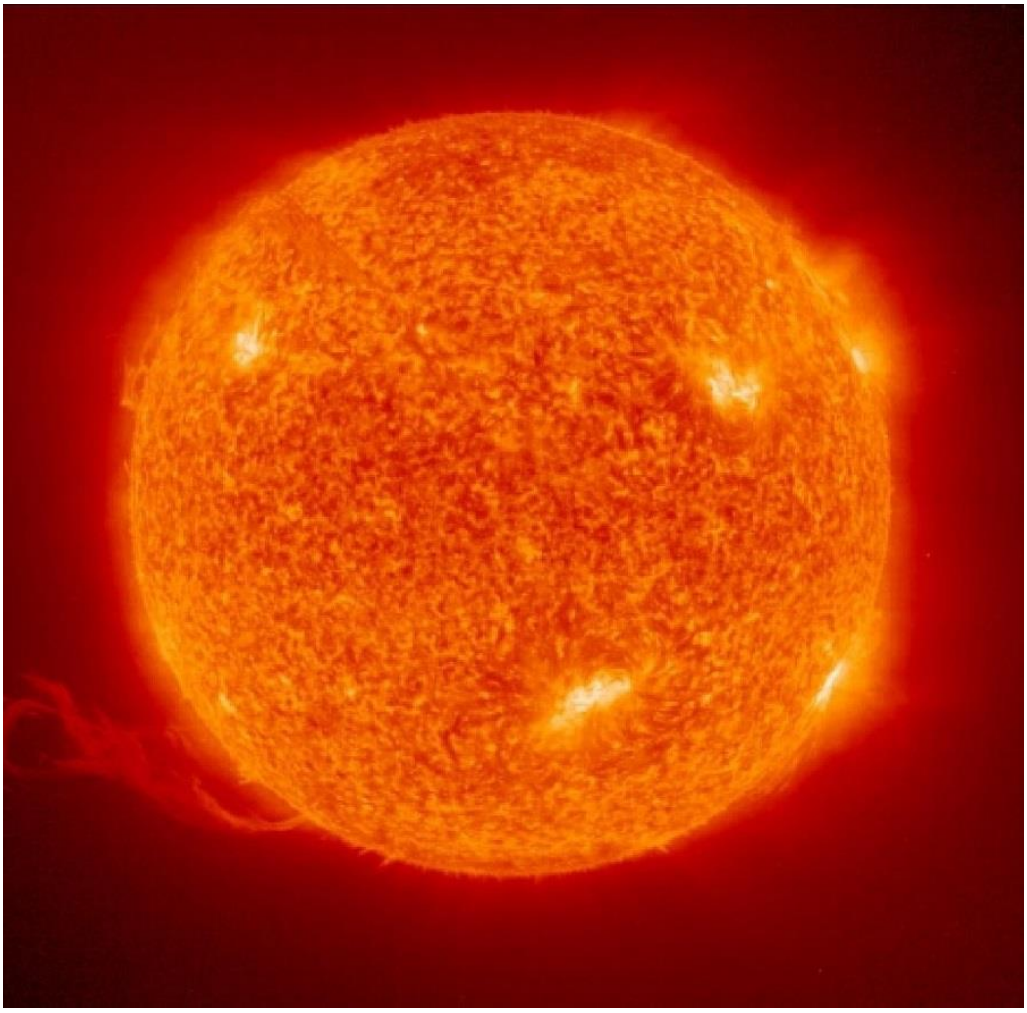
To make up for the disappointment of the clouded out lunar eclipse, Venus and Mercury were visually within 0.5° in the sky on May 28th. A few members (Alex Schmidt, David Lee, and Bill Weir) posted about their experiences on the RASC Victoria email system.

The current restrictions up on Observatory Hill, with four observers allowed at the VCO and another two set up at the Plaskett telescope parking lot, are the norm for the foreseeable future. Pandemic health restrictions are subject to change though, so if you're on the VCO observer's email list, watch for continuing updates. A reminder that although the VCO belongs to and is for the use of the members of the RASC Victoria Centre, with both weekly scheduled and unscheduled sessions run by our MiCs (Members in Charge). The VCO is located on National Research Council property. This means that all visitors to our observatory must be on our observer list and registered with the NRC. To get on the list, just contact Chris Purse (Membership Coordinator) *membership@rasc.victoria.ca* and we'll see you up there on the Hill some night soon.

Bruce Lane

The Sombrero Galaxy (M104) imaged May 13-14, 2021 by Lucky Budd

New Beginner's Guide to the Solar Wind



One day while making lunch, I was listening to my favourite radio program, BBC Radio 4's "In Our Time". The weekly broadcast covers a vast array of topics. This particular episode was about the solar wind.

Knowing next to nothing about the solar wind, in the first few seconds I was captivated to hear from one of the program's guests a few mindboggling statistics, such as:

"The solar wind is a stream of material coming out of the Sun all the time, about a millions tons per second, at between one and two million miles per hour, or about three hundred miles per second." (Professor Andrew Coates, Professor of Physics, UCL, and Deputy Director (Solar System) of the Mullard Space Science Laboratory.)

Key to understanding the solar wind is the temperature of the Sun's corona (far hotter than the Sun's surface, which is around 6000 Celsius). Its outermost atmospheric layer gets up to well over 1,000,000 C. It's in this zone that the solar wind begins.

Because gravity can't hold back the corona, particles go shooting out into space and travel throughout the solar system in every direction. These particles are mostly protons and electrons. They travel about 1.6 million kilometres an hour when they pass by Earth.

Discovering this glimpse into the wonders of the solar wind inspired me to put together a simple website, for newbies like me, or young students. It's called "*A Beginner's Guide to the Solar Wind*". (There is a lot of information out there about the solar wind, but nothing basic.)

The site was launched recently to mark the International Day of Light 2021. You're welcome to come and visit. Here is the link: *https://vanbentum.wixsite.com/solarwind*

Natasha van Bentum

Gone but not Forgotten

Mike Krempotic (1956-2021) passed away on May 1st, after a long battle with cancer. He lived his whole life in Port Alberni, which suited his pastimes of hunting and fishing, but we got to know him because of his passion for astronomy. I had the privilege of knowing him, during the long conversations we had over the years at the RASC Victoria and Cowichan Starfinders star parties. He also had a lot of experiences at the star parties in the BC interior. Mike was a very experienced observer and could be seen with either one of his 15" or 20" aperture Obsession Dobsonian reflectors. He often talked about his favourite observing site, off of Highway 4, near the *hump* to Port Alberni, and I can almost picture it, despite having never been there.

Mike was very generous to the Victoria Centre over the years. He made a sizable donation towards the acquisition of our Ritchey-Chretien telescope at the VCO, despite the fact that he would never have the chance to use it while living in Port Alberni. This year he sold us his Takahashi 130 Refractor for well below its market value, as part of our replacement for the now defunct Ritchey-Chretien telescope. When you talked to Mike, you might not have seen him for a year, but it always felt like you just had coffee with him the other day. The next star party is definitely going to have moments where we notice the absence of a few good friends.

Astronomical Terms of the Month: Meteoroid, Meteor, and Meteorite

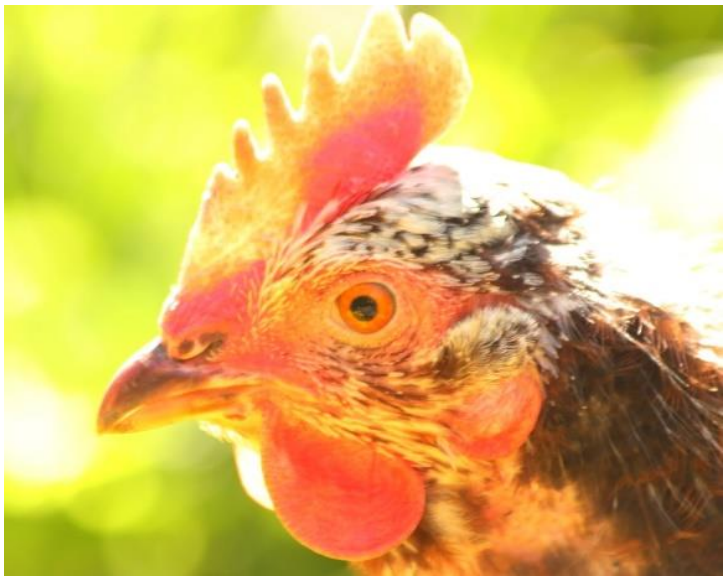
I sometimes wonder if the person they let name the different phases of a meteor was a real estate agent, since it's all about *location, location, location*. It's the same hunk of rock isn't it? When it's in space, it's a *meteoroid* and nobody pays it much attention unless they own a satellite or they're up on the International Space Station. Until it hits something, it's just one of the uncounted bits of rock and dust in our solar system.

Things get exciting once it enters our atmosphere, around 100km above the Earth's surface, and it does so at great speed. The resulting friction and compression acting on the meteor, as they are now referred to as, can put on quite a show in the night sky. Meteors are a highlight for amateur astronomers, especially the larger and more colourful ones. Most of the meteors you see are only the size of a grain of sand, but for larger ones you can actually see the elements of the meteor burning like a chemistry experiment. I've even seen them burn one colour and then burn a different colour, as they roared across the night sky at the RASC Victoria Star Party in Metchosin. If you look through enough telescope eyepieces you'll likely see one pass through your field of view. For the scheduled meteor showers, caused by Earth plowing through the debris fields left behind by comets and asteroids, it's always best to experience them under the dark skies of a new moon. When a meteor breaks apart in the atmosphere, people sometimes use the geologist term of *bolide*, which is what astronomers call a *fireball*. I'm not sure why they didn't call it a *meteoride (Ed. get on that IAU)*; just to continue the convention of variations on the same name. It might have to do with the fact that the International Astronomical Union doesn't have an official designation for *bolide* and considers an observable meteor that breaks up in the atmosphere to be a *fireball* (brighter than a planet appears in the sky) that just happens to break up in the atmosphere. The light from the Sun results in observers missing all but the most dramatic meteors streaking across the daytime sky, with the American Meteor Society suggesting that half a million *fireballs* occur in the atmosphere every year, mostly unnoticed because they enter unwitnessed over the ocean or happen in the daytime.

Once the meteor finishes putting on a show and impacts with the ground it becomes treasure - I mean a *meteorite*. It's estimated that every year somewhere around 15 000 tonnes (1000kg = 1 tonne) of dust and rocks enter our atmosphere. Most of it burns up, but nearly 5000 tonnes still ends up landing on the surface of our planet. Our active geology and weather don't do a lot to preserve these fallen fossils of our solar system for long term discovery, so most go unnoticed. There's a niche market for meteorites; a blending of geologists, astronomers, and rock hounds. One of our members generously donated one as a door prize, a few years ago, at our annual general meeting and dinner.

Bruce Lane

In Closing



As we move through the longest days of the year, during a solar minimum, it can become a bit challenging to observe deep space targets. On the evening of the summer solstice, there are only forty minutes of actual darkness, book ended by astronomical twilight. For some amateur astronomers it's time to fold up their tripods, for a few weeks around the summer solstice, and take a break for other interests. For some it just means trying harder or focusing more on brighter solar system targets. For others it means focusing more on solar astronomy, although the highlights can be few and far between as we're still emerging from the solar minimum in the eleven year cycle of sunspot activity. It's a great time for other outdoor activities. Certainly all this extra sunshine means that it's a happy time for the weeds growing in my garden. It's also a good time to make plans for your next astronomy project or catch up on your reading.

RASC Victoria is continuing to host virtual Astro Cafés through the summer on Monday evenings. The Special Interest Groups are also holding virtual meetings on Thursday evenings. The UVic Astronomy Department is still doing Wednesday night online open houses. The Friends of the Dominion Astrophysics Observatory are doing their *Summer Saturdays* online. The Nanaimo Astronomy Society is still doing online monthly meetings for their membership. Both the Cowichan Valley Starfinders and the Comox Valley Astronomy Club are both on extended hiatus due to the pandemic. RASC National is continuing to put out content on their *RASCanada* Youtube channel. Speaking our national parent organization, there's an upcoming virtual RASC National General Assembly next weekend! It starts on Friday, June 25th and you can still register online (*https://www.rasc2021ga.ca/*). Tickets are only $15.00, so this might be one of the least expensive RASC General Assemblies you'll ever have the chance to participate in. Despite the continuing restrictions of the Pandemic and longer days, there are still plenty of online activities being made available for the amateur astronomy community and public at large.

Bruce Lane: SkyNews Editor

Photography Credits

Cover: Moon in Daylight (featuring Archimedes Crater in Mare Ibrium), May 19, 2021 by Mike Nash. This is one in a series of images during full sunlight, with the telescope setup in the shade of the carport. Shot with a 180MAK, ASI290MM camera, and IR807 filter. It's amazing detail, achieved by cutting the available light with the IR filter to turn daylight into night.

Page 2: Bodes Galaxy (M81), imaged on May 9, 2021, by Lucky Budd. Shot with 8" edge HD, 0.7 focal reducer, and asi294 (No filters, on Evo alt-az mount).

Page 3: Crop of Bruce Lane (SkyNews Editor) at 2013 RASCal Star Party in Metchosin, by Chris Gainor

Page 4: Randy Enkin (RASC Victoria President) with Sextant, Feb 20, 2021, by Eva Bild.

Page 5: Moon in Daylight (52% Waxing) May 19, 2021 by Mike Nash. Shot with a APM140mm/F7, ASI290MM camera, and IR807 filter. Best 300 of 3000 frames. Processed with Firecapture, PIPP, AS!3, and Astra Image.

Page 6: McMurdo Station and Riometer in Antarctica (cropped), Dec 1970, by Jim Stilburn.

Page 7: Antarctic Sky, June 1971, by Jim Stilburn. Taken while posted at McMurdo Station, Antarctica. It shows Orion ghosting along, upside down, above the north-east horizon, with Sirius to the upper right. It was taken with Ektachrome colour film and an Asahi Pentax Spotmatic camera at f/1.8. The star trails are quite short, so the exposure was likely just a few seconds. The illumination of the sky and snow suggests that the Moon was up somewhere behind the camera.

Page 7: Photograph and Design of Astro Cafe Mug, by Joe Carr

Page 8: ISS pass in front of the Moon (cropped), May 13, 2021, by Nathan Hellner-Mestelman

Page 9: Posed Book, "The Fallen Sky", taken in Editor's home on July 15, 2020, by Bruce Lane

Page 9: Mercury Phases, by John McDonald, May 5-26, 2021. First attempt to capture the disk of Mercury, using Celestron Edge 8" SCT, with ZWO ASI120MM-S camera. ZWO ACT, Powermate 2.5x, and IR filter. Several video sequences of 5000 frames taken using SharpCap with best 9% aligned and stacked in Astrostakkert. Additional minor enhancement and normalization done in Photoshop.

Page 10: The Sombrero Galaxy, imaged over 2 nights (May 13-14, 2021) using 8" Edge HD on an Evolution mount, with a 0.7 focal reducer. 430 X 30 second light frames, 20 darks, 40 flats/dark flats into an asi294mc pro and no filters. Processed in APP and then in Lightroom.

Page 11: The Sun, Sep 8, 2001, by SOHO; courtesy of NASA and ESA

Page 12: Mike Krempotic delivering new telescope to VCO, Jan 18, 2021, by Reg Dunkley

Page 12: RASCals Star Party Panorama, July 29, 2011, by Joe Carr

Page 13: Meteorite, June 11, 2011, by kie-ker, courtesy of Pixabay.

Page 14: Speckled Sussex Chicken in Rose Garden, May 2, 2021, by Bruce Lane

Page 16: Apollo 15 mission, Engineers prepare to install 80-pound subsatellite aboard Apollo 15 Service Module; June, 9, 1971. Scan by J. L. Pickering. Courtesy of NASA.

Call for Article and Photo Submissions for the July Issue

SkyNews is looking for submissions of astronomy photos and articles for the July issue of our Victoria Centre's magazine, where we deviate from our usual subject matter to take a closer look at the hobby of birdwatching. Send your submissions to editor@victoria.rasc.ca

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