April 26 to May 2, 2021

RASC Weekly: Stellarium, Guide to Galaxy, Stargazing, Moon @ Noon, &Two Eyed Seeing!

Monday, April 26, 2021 - 19:30 to 21:30 EDT
Stellarium introductory course - Toronto Centre

This class is planned for RASC members in the Atlantic time zone. Stellarium is a powerful planetarium application available for Windows, Macintosh, and Linux computers.

Class participants will learn how to setup the software for a specific location, date, and time. They will learn how to view the simulated sky, zoom and pan, and search for and select celestial objects. Features such as gridlines, the meridian, sky settings, and red light mode will be explored. This will provide an amateur astronomer a basic overview of the Stellarium program.

Class sizes are limited to 15 individuals. A waiting list will be kept if additional participants wish to sign up. This training is not for the paid Stellarium app on smartphones or the Stellarium web app.

Part of the Stellarium Training Series. RASC members in good standing can attend for free with registration required. The course is currently **FULL** but you can join the waitlist!

Register for Waitlist for Stellarium

Tuesday, April 27, 2021 - 15:30 to 17:00 EDT
Insider's Guide to the Galaxy: Spotting Satellites

Did you know that the International Space Station orbits the Earth once every ninety minutes? Many other satellites do too, which gives us lots of opportunities to see them. We'll explain how to tell a satellite from an aircraft, talk about the different types of satellites, and share tools for finding any bright satellite in the sky, even Boeing's new space plane!

Register for Insider's Guide to the Galaxy

Wednesday, April 28, 2021 - 21:30 EDT
Wednesday, April 28, 2021 - 19:30 MDT
Introduction to Stargazing and the Universe - Edmonton Centre

Join us for an introduction to stargazing webinar! This is Session 12. Topics discussed will include: Satellites, Spica, Moon Maria, and Coma Berenices Star Cluster.

Would you like to know more about the night sky and what we can see? We welcome you to join us (via Zoom) once a month for a low intensity 45 minute presentation followed by Q&A. It's ok if you missed the previous session, they're mostly self-contained.

Join Intro to Stargazing

Thursday, April 29, 2021 - 12:00 to 12:30 EDT
The Moon at Noon: Troubleshooting

We'll be taking a pause on targets today to talk about any observing problems you may be tackling. Bring your questions and troubles, and we'll dive into solutions.

Register for the Moon at Noon

Friday, April 30, 2021 - 10:00 to 12:00 EDT
Two Eyed Seeing: Art, Indigenous Astronomy & NASA - Making Spirit, Making Art - Native Skywatchers

Join the Native Skywatchers for an exciting live show at the intersection of: art, culture, and science. Three incredible teams will present their creative work from the Ojibwe cultural lens, the D(L)akota cultural lens and the African American/South African cultural lens. The Ojibwe team will share knowledge about the Spring constellations like: Mishi Bizhiw (the Great Panther) and Madoodiswan (the Sweat Lodge). D(L)akota elders and knowledge holders will share teachings of Sunka Wakan Oyate (Horse Nation) and Canssa (Red Willow). Students and their teachers from the third grade class at Dr. Bernard Harris Sr. Elementary School in Baltimore will share the South African celestial teachings of the healing star, the crocodile who swallows the Sun, the giraffe stars, and the hopeless hunter.

Presented by: Annette S. Lee, Carl Gawboy, William Wilson, Jeffrey Tibbetts, Jim Knutson-Kolodzne, Janice Bad Moccasin, Ida Downwind, Ramona Kitto Stately, Tavia La Follette, Mrs. Venzen-Hall, and Ms. Richardson. Our lead school is the Dr. Bernard Harris Sr. Elementary School in Baltimore, Maryland. Supporting organizations are Native Skywatchers, Minnesota State Arts Board (MSAB) and NASA. Funded by Minnesota State Arts Board-Creative Support for Organizations & Individuals FY21 and NASA-Next Gen STEM.

To learn more about Native Skywatchers and their other events visit their website!

Register for Two Eyed Seeing

The 2021 General Assembly - The Stars Belong to Everyone

Join us and celebrate diversity in Astrology! The 2021 General Assembly - **The Stars Belong to Everyone** held on **June 25th - 28th** is an incredible event featuring luminary industry leaders discussing the hot topics in Astronomy.

More info, purchase tickets and register for AGM

Astroimage of the Week
Rick Stankiewicz

We are featuring winners of RASC's Astrotmaging Certificate. Winners will be featured in the banner of RASC Weekly. More information on the RASC Astrotmaging Certificate is available here.

TOTAL ECLIPSE:
"The Great American Eclipse"
This was my first total solar eclipse. I had witnessed and photographed many partial eclipses in my life, but never a total eclipse. In preparation I had read much about not bothering to take pictures (especially during your first total eclipse), but am I ever glad I tried. I still took time to take in some of what was happening around me and I stopped to view "totality" with a pair of 10X50 binoculars, but I still clicked away and the images I captured will be my souvenirs of a lifetime. I got images of Bailey's Beads, Diamond Rings and solar prominences, but the corona was what I found truly awesome. No one image captures what the dynamic range that you eye can see, but the image I included here shows some of the finer detail of the magnetic field lines radiating from the Sun and hints at the extent and distance they radiate into space. Every time I look at this image it seems to come alive before my eyes. Maybe it's just me?
Details: August 21, 2017, Hopkinsville, Kentucky.
Canon 60D with Canon 100-400mm zoom and Extender EF 1.4X III (560mm) mounted on iOptron Mini Tower Pro tracking mount at ISO 100, ½ sec., f/8.0

To see the large image, check out the RASC Astrotmaging Zenfolio page.

This Week's Observing Targets

Monday, April 26, 2021 - 23:33 EDT
Full Moon: Supermoon
The Moon will be located on the opposite side of the Earth as the Sun and its face will be will be fully illuminated. This moon has names like the Sprouting Grass Moon, the Growing Moon, and the Egg Moon. This is also the first of three supermoons for 2021. The Moon will be near its closest approach to the Earth and may look slightly larger and brighter than usual.

Member Highlights

Rouzbeh Bidshahri is an astrophotographer and member at the RASC who has excelled in capturing deep sky images!

"Astrophotography is the most complex form of photography. The targets are extremely distant, meaning they are both very small and emit very little light. These deep space targets are even more extreme compared to closer solar system targets.

Each single picture is a project with a total exposure time typically over 1,000 minutes (100,000 times longer than a regular photo!). Since the earth is rotating, the robotic arm has to rotate all the imaging equipment (weighing more than a person) in the opposite direction to counteract the movement. The optics are aligned with the earth's axis with an accuracy less than that of a human hair."

This is the M81 galaxy image was taken from his backyard in Vancouver with 29 hours of data acquisition. The planets at 7000mm of focal length.

Visit his Website