May 17 to May 23, 2021

RASC Weekly: Speaker's Night, Moon @ Noon, and Earth & Beyond!

Wednesday, May 19, 2021 - 19:30 to 21:00 EDT Speaker's Night: What is DUNE? - Toronto Centre

Embark on the underground telescope to pierce the secrets of matter!

Speaker: Dr. Claire David, Assistant Professor, Physics and Astronomy, York University; Associate Scientist, Fermilab

The Deep Underground Neutrino Experiment (DUNE) is an international project dedicated to studying a mysterious particle called the neutrino. They are one of the most abundant elements in the cosmos, yet they barely interact with matter. Trillions are going through your body every second (harmlessly).

Physicists are very curious about the shy neutrinos as this particle alone could help us understand our entire Universe, especially solving a century old mystery: "Why, after the Big Bang, did matter overtake antimatter?" Registration is not required and anyone can attend for free!

Register for Speaker's Night

Thursday, May 20, 2021 - 12:00 to 12:30 EDT



We have some niche topics today, including how to use math and your own photos of the Moon to measure the depth of craters. We'll also talk about lunar libration and how to observe some unique objects on the edge of the Moon by looking at the right time!

Register for the Moon at Noon

Thursday, May 20, 2021 - 21:30 to 23:30 EDT Thursday, May 20, 2021 - 19:30 to 21:30 MDT

Earth & Beyond: Young Stars amid External Radiation and

Colliding Clusters - Calgary Centre

Presented by Alexandra Yep - RASC Calgary

Stars are not born in isolation. Rather, they are born in a cluster of a hundred or even a thousand stars. Star clusters, meanwhile, are not alone either. In galaxies like ours, many of them form in the spiral arms. One may well ask: Do stars affect neighboring stars? Do clusters affect neighboring clusters? They certainly do. Hot stars can irradiate nearby young stars and prevent them from forming planets. Clusters can collide with each other, such that stars pass through the edges of each other's solar systems and kick up comets and asteroids. It's tough to be a planet out there.

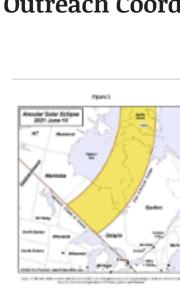
Alexandra Yep is a poet turned astronomer. Her first science course in college was quantum mechanics, and by some miracle she passed the course and kept on going. She is now pursuing her Ph.D. at Georgia State University, researching young stars in a moderate radiation environment and the collision of star clusters. She is on track to graduate this year.

Zoom passcode: 200735

Join Earth & Beyond

Solar Eclipse Videos by Outreach Coordinator Jenna Hinds







Get excited about eclipses with Outreach Coordinator, Jenna Hinds! We will be posting every other day leading up to the June 10th solar eclipse on all our social platforms. Tune in to understand the dos and don'ts of solar eclipse observing and have your questions answered by an expert.



Astroimage of the Week

Dan Meek

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

M31 ANDROMEDA GALAXY:

"The image is a 4 hour RGB exposure done using a TeleVue NP127is telescope and a QSI583wsg CCD camera on a CGE PRO mount. I took the image from Chain Lakes Provincial Park, Alberta. Camera control and preprocessing was



done through ImagesPlus. Processing was done through PixInsight with final touch-up, as required, through Photoshop. Guiding was through PHD2 and a Lodestar camera. As a collision with M31 in the distant future is our home galaxy's ultimate fate, how can a person not be fascinated by this object."

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

This Week's Observing Targets

Monday, May 17, 2021

Mercury at Greatest Eastern Elongation The planet Mercury reaches greatest eastern elongation of 22

degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the evening sky. Look for the planet low in the western sky just after sunset.



Check out the sky this week on SkyNews: This Week's Sky: May 17 to 23, 2021: The show stealers this week are the Moon and the gas giants. Look for the Lunar X, Saturn standing still in our sky and a double

shadow transit on Jupiter. Read more in SkyNews!

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