

World's biggest telescope almost ready for next year's launch

There's much excitement about the 2019 launch of the \$10 Billion US James Webb Space Telescope

(<https://www.jwst.nasa.gov>). After being subjected to 100 days of grueling cryogenic testing, engineers are now confident it can stay in frigid outer space for years.

While there's never been empirical proof of life outside our planet, one of its missions is to study the surfaces of exoplanets stratospheres to examine this possibility.

A 2004 movie called the *Privileged Planet*

<https://privilegedplanet.com/> explains it takes much more than just an atmosphere to sustain complex life.

For example, our sky is clear; the moon is precisely the right size/distance from Earth, its gravity stabilizes the Earth's rotation, our position in our galaxy is just right, our sun is its precise mass and composition: all these aspects and much more, are essential for Earth's habitability.

Also, skeptics have been astonishingly critical for scientists in discovering the universe. Former Canadian Minister of Defence and Aerospace engineer Paul Hellyer (<http://paulhellyerweb.com>), the Canada's longest serving Queen's Privy Council, gives many public talks on "above" top-secret, multi-generational advanced technology which needs to be made popular.

At 94 years, he's busier than ever using his connections and skills to educate the public of what's true and false regarding space technologies. One of the most encouraging speeches given at Donald Trump's January 21, 2017 inauguration



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promises a breakthrough like human kind has never seen before which will finally prove Hellyer a hero after decades: "We stand at the birth of a new millennium, ready to unlock the mysteries of space, to harness the energies, industries and technologies of tomorrow."

Sky watch for the next month:

1. Dawn Quarter

Moon with Saturn/Mars rise: On Sunday April 08th look SSE before sunrise and watch them rise close together into the morning.

2. Thin Crescent Moon sets next to

Venus: On Tuesday April 18 at dusk look NWW to watch them set into the night.

3. Near Full Moon and Jupiter rises at dusk: On Monday, April 30th before sunset, look SEE around 20:30 to watch these rise into the night. A good binos can catch 4 of Jupiter's Moons.

4. Lyrids Meteor Shower: also known as April shooting stars produced by dust particles left behind by comet C/1861 G1 Thatcher discovered in 1861 will peak before dawn Sunday morning April 22. Look East into the constellation of Lyra near Vega and you should be able to catch 10-20 meteors per hour on average with rare surges of up to 100 with no moonlight.

Public events for the next month:

Monthly Open House at Calgary's Rothney Observatory near Priddis-Astrophysics on the Cutting Edge 2018; Discoveries in physics are occurring at an incredible pace. University of Calgary



Photo courtesy Neel Roberts

Doug Thorpe of Calgary sets up his Dobsonian Telescope for the visitors. He is the RASC Calgary Youth Leader and one of many volunteers at the monthly Rothney Observatory meetings. If you're interested in the Youth Meetings, check out the website at <http://calgary.rasc.ca/youth.htm> or contact Doug at dthorp@shaw.ca.

students will speak on the latest, fastest, smallest and most fascinating new research in physics. The evening will kick off with an observatory check-in, then a presentation on what's up the sky by the RASC Calgary Centre. You will have the opportunity to look through the telescopes, indoor presentation and astronomers will be on hand to answer questions on Saturday, April 28 20:00 to 23:00. The entrance fee \$30 per car.

For further information, contact Jennifer Howse at jhowse@phas.ucalgary.ca, (403) 931-2366. Their website is at: <https://www.ucalgary.ca/rao/> is updated regularly.

Happy Spring and here is to much

warmer days!

Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada (RASC)-the nation's leading astronomy club founded in 1849 with over 5,000 members and 29 centers across Canada. Neel welcomes your questions and comments at (403)560-6574, Neel_Roberts@ptccanada.com. The members meet once a month on weekends at Calgary's Rothney Observatory near Priddis and you can check out times at www.ucalgary.ca/rao/calendar. Like them at Facebook at www.facebook.com/groups/272037680377/, Twitter: twitter.com/CalgaryRASC & YouTube: www.youtube.com/user/RASCCalgary.