

Wellington Astronomical Society 2018-07 eNewsletter

Wellington Astronomical Society Inc. email Newsletter for July 2018

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1. JULY 2018 SOCIETY MEETING

The next WAS meeting will be held on Wednesday 4th of July at 7:30 pm at Space Place, Carter Observatory, 40 Salamanca Rd, Kelburn.

At this month's meeting, we have 2 presenters, Amber Joseph with **Students** in **Space**; **Our Generation and Beyond** and Edward Wilcock with **Photography: The Night Sky, Norway and Iceland**.

The evening will consist of:

- 1. The Night sky in July in the planetarium
- 2. Main presentations beginning at 7:50 pm
- 3. A small celebration of the Winter Solstice / Matariki.

Students in Space; Our Generation and Beyond - Amber Joseph

The Students' Space Association is New Zealand's only completely studentrun Space interest group that spans across the nation from Primary to Secondary to Tertiary level. Hear from their President, Amber Joseph, about the story of their origin and how the next generation sees themselves contributing to the future of Space development in New Zealand.



Amber is currently studying at Victoria University towards a degree in Software Engineering. She has a huge passion for the inclusion and development of young people within the technology sector; where that be Space or otherwise. After the creation of the New Zealand Student's Space Association early this year, Amber has found herself travelling New Zealand on a mission to inspire and empower young people of all ages and interests to contribute to the future of the New Zealand Space Industry.

Photography: The Night Sky, Norway and Iceland - Edward Wilcock In 2013, Edward developed a passion for photography with an interest in the night sky.

Five years on, he has learnt much on developing his photography, along with the tools he uses to create these images. His photography has led him to Norway and Iceland to capture the Northern lights and picturesque snow-capped landscapes, and creating a short time-lapse film **Touching the Arctic**.



Exploring the Solar System from Europe – Siân Cleaver, Fri 13th July 10:00 – 11:30am, Alan MacDiarmid Centre, Gracefield Innovation Quarter, 69 Gracefield Road, Lower Hutt.

The British High Commission and Callaghan Innovation invite you to join in for morning tea and a presentation by Siân Cleaver, a Mission Systems Engineer at Airbus Defence and Space in the UK.

Siân will give an overview of the space industry in Europe, from the perspective of an engineer working at Airbus. She will focus in particular on three missions, primed by Airbus:

- Solar Orbiter: a mission to investigate the physics of the Sun and the heliosphere
- ExoMars Rover: Europe's first Mars rover
- The European contribution to NASA's Orion spacecraft: the next crewed vehicle intended to take astronauts to the Moon, Mars and beyond.

It is essential to <u>register</u>.

WAS Astrophotography group / Dark Sky Observing - Saturday 14th July 7:00 pm, Brooklyn Hill Turbine.

We have access to this site for both astrophotography and dark sky observing. Please be at the gates by 7:00pm. The gates will be opened for cars to drive in and closed again at 7:15pm. There won't be anyone there to let you in if you are late. Any updates will be posted on the WAS Astrophotography Group Facebook page closer to the time. For further details or cancellations contact Chris 021 890 222, Paul 021 251 1559 or Antony 021 253 4979.

WAS Observing Evening - Saturday 21st July, 7:00 pm, Tawa College. See many wonderful objects, star clusters, galaxies, dying stars and nebulae. We will be focusing on the area around the Southern Cross and Milky Way which lies high across the night sky. The planets Jupiter, Saturn and Mars are also visible.

Come and learn how to star-hop through the night sky to find many of the various astronomical objects using the Society's Dobsonian telescopes. Chris is often there on Friday evenings too so feel free to come along though it would be best to give him a ring on 021 890 222 to check on conditions.

3. **ASTRONOMY NEWS**

The Story of 'Oumuamua, the first visitor from another solar system.



In October 2017, astrobiologist Karen J. Meech got the call every astronomer waits for: NASA had spotted the very first visitor from another star system. The interstellar comet -- a half-mile-long object eventually named `Oumuamua, from the Hawaiian for "scout" or "messenger" - raised intriguing questions: Was it a chunk of rocky debris from a new star system, shredded material from a supernova explosion, evidence of alien technology or something else altogether? In this riveting talk, Meech tells the story of how her team raced against the clock to find answers about this unexpected gift from afar.

Einstein Was Right! Scientists Confirm General Relativity Works With Distant Galaxy



A new study validates Einstein's theory of general relativity in a distant galaxy for the first time.

This study supports our current understanding of gravity and provides more evidence for the existence of dark matter and dark energy — two mysterious concepts that scientists know about only indirectly by observing their effects on cosmic objects.

Albert Einstein's theory of general relativity, published in 1916, explains how gravity is the result of a concept known as the fabric of space-time. Simply put, the theory predicts how much the mass of an object — in this case, a galaxy — curves space-time.

Hubble's Messier Catalogue



Although there are as many as one hundred billion comets in the outer regions of the solar system, prior to 1995, only around 900 had ever been discovered. This is because most comets are too dim to be detected without the proper astronomical equipment. Occasionally, however, a comet will sweep past the Sun that is bright enough to be seen during the daytime with the naked eye.

One such instance occurred in 1744. Comet Klinkenberg-Chéseaux, discovered by three amateur astronomers in late 1743, grew steadily brighter as it approached the Sun. By the end of February 1744, the comet had reached its peak brightness at an apparent magnitude of –7, making it the brightest object in the sky except for the Sun and Moon. The comet's brilliance captured the interest of professional and amateur astronomers alike, including a young Charles Messier.

NASA Delays Launch of James Webb Space Telescope Again — This Time to 2021

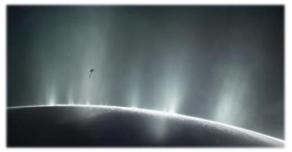


NASA has delayed the launch of its huge, highly anticipated James Webb Space Telescope by another 10 months.

The liftoff of Webb, the successor to the agency's iconic Hubble Space Telescope, has been pushed back from May 2020 to March 2021, NASA officials announced today (June 27). The project's development cost has risen from \$8 billion to \$8.8 billion, and its total lifecycle price tag now stands at \$9.66 billion, they added.

The rescheduling is the latest in a series of delays for Webb, which NASA had originally hoped to get off the ground way back in 2007.

BREAKING: Complex Organic Molecules Discovered on Enceladus For The First Time



It has everything needed to host alien life!

The plumes of salty water shooting out of Saturn's ocean moon Enceladus have just ponied up one of the most significant ingredients for habitability: large organic molecules rich in carbon.

4. NIGHT SKY FOR JULY 2018

The Night Sky for July 2018 courtesy of the University of Canterbury.

5. **CONTACTS**

The following members were elected to Council at the Nov 2017 AGM

President: Antony Gomez (president@was.org.nz) - 021 253 4979

Vice President: Duncan Hall (vice-president@was.org.nz)

Secretary: Becky Bateman (secretary@was.org.nz)

Treasurer: John Homes

Membership Secretary: Janine Bidmead (membership@was.org.nz)

Website: Peter Woods (webmaster@was.org.nz)

Telescope custodian: Chris Monigatti

Council: Andrew Fuller, Chris Monigatti, Frank Andrews, Janine

Bidmead, Murray Forbes, Peter Woods, Roland Idaczyk

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Wellington 6140, New Zealand

Website: www.was.org.nz

Facebook page: Wellington Astronomical Society.

Facebook group: <u>WAS – Wellington Astronomical Society</u> (for members) Facebook Astrophotography group: <u>WAS Astrophotography Group</u> (for

members)