



**Wellington Astronomical Society
2019-04 eNewsletter**

**Wellington Astronomical Society Inc.
email Newsletter for April 2019**

Contents

1. **April 2019 Society Meeting**
2. **Events**
3. **Society News**
4. **Astronomy News**
5. **Night Sky for April 2019**
6. **Contacts**

1. APRIL 2019 SOCIETY MEETING

The next WAS meeting will be held on Wednesday 3rd of April at 7.30 pm at Space Place, Carter Observatory, 40 Salamanca Rd, Kelburn.

The meeting will consist of:

1. The Night Sky in April
 2. Astronomy News
 3. Main talk at 8:00 pm
-



Blue Light Aotearoa - Dr Francine Harland

Our increasing exposure to artificial blue light at night is putting us at risk in New Zealand. There is growing concern about potential health problems from our exposure to blue light from artificial lights and screens at night. Royal Society Te Apārangi's report, Blue Light Aotearoa, investigates how artificial blue light disrupts wildlife, our body clock, and our ability to study the sky. Blue wavelength light is important for our health and wellbeing but can have a negative effect at the wrong time of day. There are many things we can do to protect ourselves and te taiao, the environment, from artificial blue light at night.

Francine develops expert advice to government and the public on important issues facing Aotearoa New Zealand. She worked with the New Zealand research community to summarise the latest evidence on blue light and its impacts on our health, wildlife and the night sky. Francine's background is in chemistry and microbiology. She has actively worked with a variety of groups across New Zealand with interests in studying our environmental issues. Her previous work experience includes roles in teaching, science outreach, research and commercial testing laboratories.

This presentation is part of our celebration of [International Dark Sky Week 2019](#), 31 March - 7 April.

2. EVENTS

Global Astronomy Month – April



Astronomers Without Borders Global Astronomy Month

Global Astronomy Month (GAM), organised each April by Astronomers Without Borders, is the world's largest global celebration of astronomy. Every year GAM brings new ideas and new opportunities, bringing enthusiasts together worldwide to celebrate Astronomers Without Borders' motto: One People, One Sky. More details are available at [GAM 2019 website](#) and the [GAM Facebook page](#).

WAS will hold a Global Star Party on Saturday 13th April (see below) promoting GAM. Please show your support by coming along and bringing your friends and family.

International Dark Sky Week - Sunday 31st March – Saturday 7th April.



Created in 2003 by high-school student Jennifer Barlow, [International Dark Sky Week](#) has grown to become a worldwide event and a key component of Global Astronomy Month. Each year it is held in April around Astronomy Day (this year International Astronomy Day is 11th April).

In explaining why she started the week Barlow said, "I want people to be able to see the wonder of the night sky without the effects of light pollution. The universe is our view into our past and our vision into the future. ... I want to help preserve its wonder."

International Dark Sky Week draws attention to the problems associated with light pollution and promotes simple solutions available to mitigate it.

You may have noticed this month's talk, as well as the Astronomy Night at the Hutt library will be focused on light pollution in honour of International Dark Sky Week. People are also welcome to attend the Dark Sky Observing evening (see below) where the night sky free from light pollution can truly be appreciated!

Astronomy Night – Lower Hutt War Memorial Library – Friday 5th April 6.30 pm.

Light pollution is a worldwide problem, with the latest research showing impacts on human health and wildlife as well as masking our views of the universe we are part of.

We're in a period of rapid escalation of this issue, as we're changing the colour of light we're using as well as increasing the intensity of light pollution created.

In this talk Lee Mauger, of the Martinborough Dark Sky Society, will touch on the latest research on the impacts of light pollution. He will also talk about how the Wairarapa is looking to mitigate these problems through the creation of an International Dark Sky Reserve.

If the weather is clear we will head outside after the talk to look through the telescopes.

WAS Astrophotography Group / Dark Sky Observing - Saturday 6th April 8.30 pm, Star Field - John Whitby's dark sky site.

As part of our celebration of [International Dark Sky Week 2019](#), 31 March - 7 April come along to this Astrophotography / Deep Sky event at a dark sky site in the Wairarapa. With no Moon, you will see some amazing dark skies with the Milky Way standing out.

As this is a private property, you will need to register if you want to come along to this event by contacting us through Facebook Messenger or by emailing president@was.org.nz. Include your email and mobile phone in the text if you are using Facebook Messenger. Directions to the site and any updates will be emailed out. Preference will be given to members of the Society first. (To join the Society see <https://www.was.org.nz/join-us/>)

What to bring for astrophotography:

- A DSLR or mirrorless camera
- A wide-angle lens (preferably)
- A tripod to fix the camera to
- Warm clothes as it gets pretty cold at night
- Snacks and warm drinks if you want

With people taking photos, keep lights to a minimum (red lights if you can) especially car headlights (use parking lights).

For those just interested in Deep Sky Observing, telescopes will be provided unless you want to bring your own.

For further details or cancellations contact Chris 021 890 222 or Antony 021 253 4979. This event will be updated by the afternoon on the day of the event if the weather forecast is not looking good.

Global Star Party - Saturday 13th April, 7.30 pm, Wellington Waterfront.



Come to the Wellington Waterfront and see close-up through our telescopes the areas on the Moon where the manned Moon landings took place.

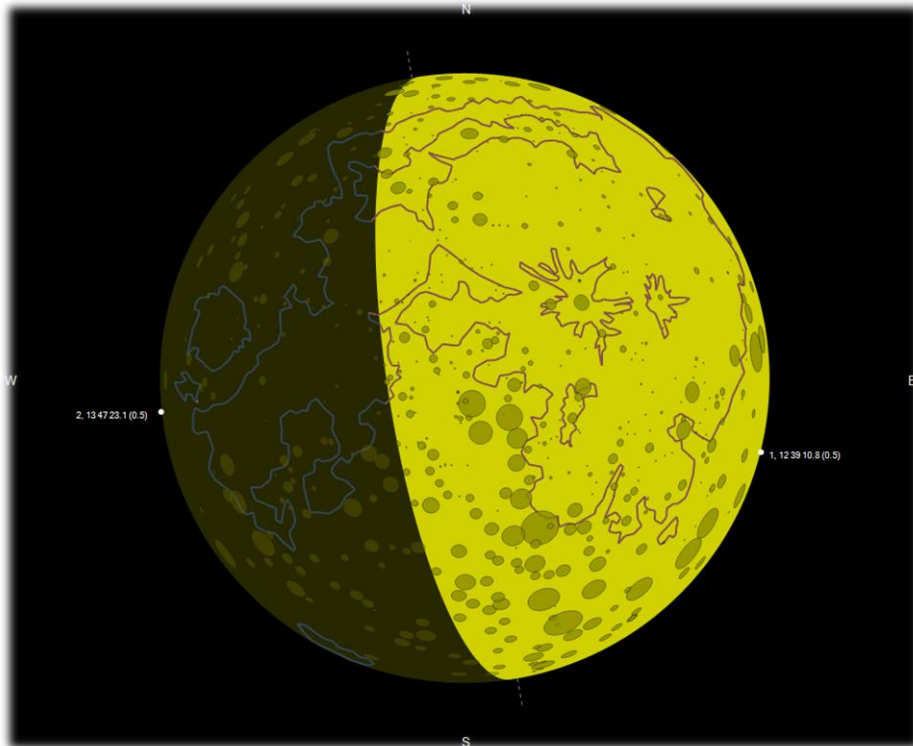
Wellington Astronomical Society is celebrating Global Astronomy Month 2019, an event celebrated all over the world during April. The focus this year is Spirit of Apollo celebrating the 50th anniversary of the Moon landings. Come and join in the Global Star Party which is celebrated on the same day by astronomical societies and organisations all around world.

Saturn Lunar Occultation Starparty – Thursday 25th April, 8.00 pm onwards, venue to be advised.

We are planning an evening at a venue in the Wellington area to view this relatively rare event. As well as having telescopes out, we are looking at having a presentation, documentaries on a screen, and a general social gathering as the excitement builds. Tea and coffee will be provided. Bring some snacks to share.

3. SOCIETY NEWS

Saturn Lunar Occultation

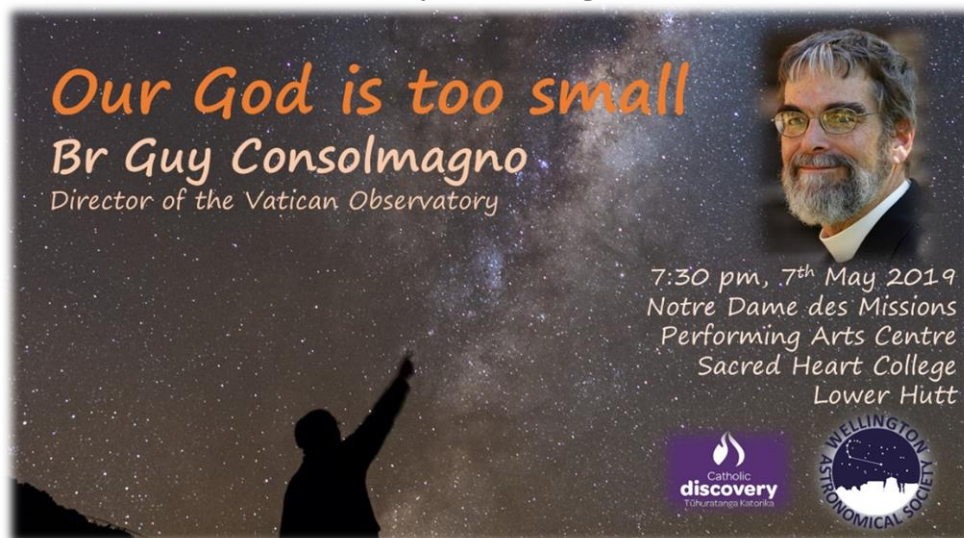


On the morning of Friday 26th of April we will have the rare opportunity to witness Saturn being occulted by the Moon. It will disappear behind the bright limb of the moon first and then reappear from behind the dark limb approximately 70 minutes later. The mid-point of the disappearance is UT 12h 39m 11s. New Zealand Daylight Saving will have finished earlier in the month so this will be 12:39am NZST. Saturn's rings will start to disappear first, beginning at 12h 38m 29s. The planet itself will start to disappear at 12h 38m 52s and completely disappear by 12h 39m 30s. The ring will have completely disappeared by 12h 39m 53s.

As I said above, the mid-point of the reappearance will be UT 13h 47m 23s, i.e. 1:47 am on Friday morning. The ring will start to reappear first at 13h 46m 37 and the planet at 13h 47m 02s. The planet will have completely reappeared by 13h 47m 44s and the last of the ring by 13h 48m 10s.

The event takes place at an altitude of 26° above the horizon so should be above the local horizon for most observers. I've included a map of the moon showing where Saturn will be against the moon's limb when it disappears (dot # 1) and then reappears (dot #2). I've not managed to see one of these occultations myself yet (the weather has always defeated me) but I've heard it's a spectacular sight and so I'll be out again with fingers crossed at midnight. - *Murray Forbes*

Our God is Too Small – Br Guy Consolmagno



Known as "The Pope's Astronomer," Br Guy Consolmagno SJ will be delivering a free public lecture on the 7th May at the Notre Dame des Missions Performing Arts Centre, Sacred Heart College, Lower Hutt. He was appointed by Pope Francis to be the Director of the Vatican Observatory in September 2015, and is the President of the Vatican Observatory Foundation. He is a Jesuit religious brother, world leading astronomer, researcher, author, TED Talks and American University circuit speaker, who is visiting New Zealand to discuss his vision of God and our universe.

His research is centred on the connections between meteorites and asteroids, and the origin and evolution of small bodies in the solar system. In addition to over 40 refereed scientific papers, he has co-authored several books on astronomy for the popular market, which have been translated into multiple languages. During 1996, he took part in the Antarctic Search for Meteorites, ANSMET, where he discovered a number of meteorites on the ice fields of Antarctica. An asteroid was named in his honour by the International Astronomical Union, IAU in 2000: 4597 Consolmagno. In 2014, he was awarded the Carl Sagan Medal for outstanding communication by an active planetary scientist to the general public by the Division for Planetary Sciences of the American Astronomical Society.

Br Guy believes in the need for science and religion to work alongside one another rather than as competing ideologies. The title of his talk is Our God is Too Small, where he will look at humanity's venture on to the other planets in the solar system, the unimaginable size of the cosmos and the need for us to understand the universe created by God.

This free public lecture has been made available through Catholic Discovery NZ @catholicdiscovery.nz and the Wellington Astronomical Society @WellingtonAstronomicalSociety. Details for the lecture can be found on Eventfinda. Bookings are essential through Eventfinda.

Abstract - Our God is Too Small

Humanity's robots have visited every planet in the solar system; and fifty years ago, humans even walked on the Moon. The contrast between "the World" and "the Cosmos" is becoming blurred, even as we are learning just how big the Cosmos is. We need to understand that all those other planets are real places, part of the same universe created by God and redeemed by the Incarnation. This presents a glorious opportunity for us to come to grips with what it means to be a creature, and what it means to be redeemed... and to truly appreciate the words of the Psalmist: *When I look at your heavens, the work of your fingers, the moon and the stars that you have established; what are human beings that you are mindful of them, mortals that you care for them? Yet you have made them a little lower than God and crowned them with glory and honour.*

This lecture is free however we ask that you please register at [Eventfinda](#). Tickets will be checked at the door.

RASNZ Conference 2019 – New Plymouth

A reminder for those who wish to attend the [RASNZ conference](#) on the 17th – 19th May. Details about the conference, including how to register, can be found [here](#).

Wellington Astronomical Society Research Astronomy Group (WAS RAG)

New members of WAS (or perhaps even not-so-new members) may not be aware that we also run another group meeting once per month for members interested in doing research observations and analysis. This group is called WAS RAG (Wellington Astronomical Society Research Astronomy Group). Our current interests include occultations and variable stars.

If you're interested in joining the group, please contact Roland Idaczyk (roland@cno.org.nz) to be added to our mailing list and come along to our next meeting. All our meetings are held the week after the Society's general meeting, i.e. on the second Wednesday of the month. This means the next meeting will be on Wednesday 10th April.

The meeting runs from 5:30pm to 7:30pm and is held at my workplace. This is WSP-Opus Research, at 33 The Esplanade in Petone. The map shows how you can get to it travelling either from Wellington (come along the Esplanade) or from Lower Hutt (come along Hutt Road). There are five visitors' car parks (not surprisingly, labelled 'Opus visitors'), which will probably be free at that time of the day. Alternatively, you can park nearby on either the Esplanade or on Hutt Road.

The outside sliding doors are locked after 5pm so I'll be sitting in the entrance between 5:00pm to 5:30pm to let everyone in. If you arrive outside these times, ring me on (4) 5870612 and I'll rush out (well, walk at a fastish pace) to let you in.

When you arrive, for health & safety reasons, you need to sign-in. This is done using the large touch-screen at reception. The sign-in process includes a safety induction. I'll also run through that again before we begin the meeting. See you then. - *Murray Forbes*



(For a bigger version of the map please follow [this link](#)).

Video Recording of the March meeting presentation

For those who missed the March meeting, Gaby Perez's presentation *The Lady's Guide to the Galaxy*, is available by following the link [here](#). Use the password WASvideo.

Astronz Binoculars for Sale & Astronz Discounts for WAS Members

Due to demand, WAS has more pairs of Astronz 10x50 binoculars to sell at a reduced price to members. Perfect for astronomers, they are great for easily navigating your way around the night sky and you may be surprised how much you can see through them. Binoculars are available for \$80 each (usually sell for \$99 excluding freight). Please email Antony Gomez, president@was.org.nz, if you would like to buy a pair.

Please also take advantage of the 10% discount available if ordering equipment from Astronz by mentioning you are a WAS member. Orders over \$500 will also earn you a FREE WAS membership!

4. ASTRONOMY NEWS

Up to date Astronomy News and Society events is available on the Society's Facebook page: [Wellington Astronomical Society](#).

5. NIGHT SKY FOR APRIL 2019

The [Night Sky for April 2019](#) courtesy of the University of Canterbury.

Daylight Saving Ends – Sunday 7th April, 2:00 am.

Remember to put your clocks back one hour before you go to bed on Saturday 6th of April! The long summer nights may have ended but we can console ourselves with more darkness for some serious Astronomy!

Night Sky Notes for April 2019



This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.org to find local clubs, events, and more!

Mars the Wanderer - David Prosper

April's skies find Mars traveling between star clusters after sunset, and a great gathering of planets just before sunrise.

Mars shows stargazers exactly what the term “planet” originally meant with its rapid movement across the evening sky this month. The ancient Greeks used the term *planete*, meaning *wanderer*, to label the bright star-like objects that travelled between the constellations of the zodiac year after year.

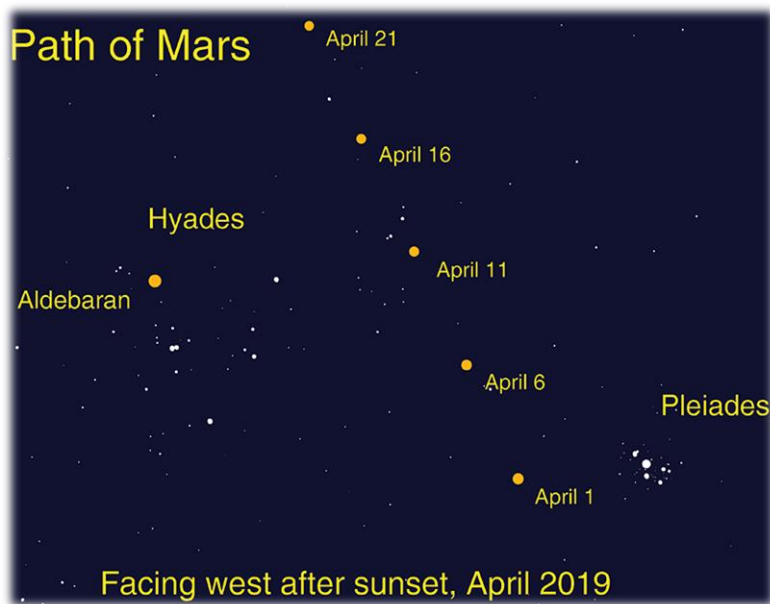
You can watch Mars as it wanders through the sky throughout April, visible in the west for several hours after sunset. Mars travels past two of the most famous star clusters in our night sky: the **Pleiades** and **Hyades**. Look for the red planet next to the tiny but bright Pleiades on April 1st. By the second week in April, it has moved eastward in Taurus towards the larger V-shaped Hyades. Red Mars appears to the right of the slightly brighter red-orange star **Aldebaran** on April 11th. We see only the brightest stars in these clusters with our unaided eyes; how many additional stars can you observe through binoculars?

Open clusters are made up of young stars born from the same “star nursery” of gas and dust. These two open clusters are roughly similar in size. The Pleiades appears much smaller as they are 444 light years away, roughly 3 times the distance of the Hyades, at 151 light years distant. Aldebaran is in the same line of sight as the Hyades, but is actually not a member of the cluster; it actually shines just 65 light years away! By comparison, Mars is practically next door to us, this month just a mere 18 light minutes from Earth - that’s about almost 200 million miles. Think of the difference between how long it takes the light to travel from these bodies: 18 minutes vs. 65 years!

The rest of the bright planets rise before dawn, in a loose lineup starting from just above the eastern horizon to high above the south: **Mercury**, **Venus**, **Saturn**, and **Jupiter**. Watch this month as the apparent gap widens considerably between the gas giants and terrestrial planets. Mercury hugs the horizon all month, with Venus racing down morning after morning to join its dimmer inner solar system companion right before sunrise. In contrast, the giants Jupiter and Saturn move away from the horizon and rise earlier all month long, with Jupiter rising before midnight by the end of April.

The **Lyrids** meteor shower peaks on April 22nd, but sadly all but the brightest meteors will be washed out by the light of a bright gibbous Moon. **Note for Southern Hemisphere observers:** Because this shower's radiant point is so far north on the sky's dome, you'll see fewer Lyrid meteors. But you might see some! Try watching between midnight and dawn on April 22 and/or 23.

You can catch up on all of NASA's current and future missions at nasa.gov



Caption: The path of Mars between the Pleiades and Hyades in April. Image created with assistance from Stellarium.

6. CONTACTS

The following members were elected to Council at the Nov 2018 AGM

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

Vice President: Andrew Fuller (vice-president@was.org.nz)

Secretary: Matt Boucher (secretary@was.org.nz)

Treasurer: Duncan Hall (treasurer@was.org.nz)

Membership Secretary: Shazia Gazi (membership@was.org.nz)

Newsletter Editor: Shelly Frost (editor@was.org.nz)

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

Telescope custodian: Chris Monigatti

Research Group coordinator: Roland Idaczyk

Council: Shazia Gazi, Shelly Frost, Peter Woods, Chris Monigatti,
Roland Idaczyk, Murray Forbes, John Homes, Becky Bateman, Gaby
Perez, Lee Mauger

Postal Address:

Wellington Astronomical Society,

PO Box 3181,

Wellington 6140, New Zealand

Website: www.was.org.nz

Facebook page: [Wellington Astronomical Society](#).

Facebook group: [WAS – Wellington Astronomical Society](#) (for members)

Facebook Astrophotography group: [WAS Astrophotography Group](#) (for
members)
