



**Wellington Astronomical Society  
2018-10 eNewsletter**

---

**Wellington Astronomical Society Inc.  
email Newsletter for October 2018**

---

**Contents**

1. **October 2018 Society Meeting**
2. **Events**
3. **Society News**
4. **Astronomy News**
5. **Night Sky for October 2018**
6. **Contacts**

---

**1. OCTOBER 2018 SOCIETY MEETING**

The next WAS meeting will be held on Wednesday 3<sup>rd</sup> of October at 7:30 pm at Space Place, Carter Observatory, 40 Salamanca Rd, Kelburn.

The meeting will consist of:

1. The Night sky in October
2. Astronomy News
3. Main talk at 8:00 pm

**Life on Mars – Bruce Ngataierua**

---



Bruce Ngataierua is a Secondary Science Teacher who has a passion for Astronomy and Earth Science and He has been an active member of the Hawkes Bay Astronomical Society for the last two years.

In 2012, Bruce was involved with a small group of people where he spent two weeks in a simulation based on the colonisation of Mars. This included living in a habitat, eating freeze dried food and wearing space suits. The simulation objectives were to help answer questions around how the team would find living together and the challenges of colonisation on another world.

---

## 2. EVENTS

**WAS Astrophotography group / Dark Sky Observing** - Saturday 6th October 8:00 pm, Star Field - John Whitby's dark sky site.

We have another opportunity to go to John Whitby's Star Field site, 10 mins outside of Martinborough, for an astrophotography / dark sky observing session. To attend and get directions to Star Field, please email Antony ([president@was.org.nz](mailto:president@was.org.nz)) as we need to keep track of numbers. Any updates will be posted on the [WAS Facebook page](#) closer to the time. For further details or cancellations contact Chris 021 890 222 or Antony 021 253 4979.

**2018 Beatrice Hill Tinsley Lecture** – Tuesday 9th October, 7:00pm, Horne Lecture Theatre, Level 12 Ward Support Block, Wellington Hospital. ([See directions](#))

**The Dawn of Gravitational Wave Astronomy – Dr Paul Groot** (Professor of Astronomy, Radboud University, The Netherlands)

---

**The Beatrice Hill Tinsley 2018 Lecture**  
**Dawn of Gravitational Wave**  
**Astronomy**  
**Dr. Paul Groot - Radboud University**

Free Public Lecture  
 7:00 pm Tuesday 9th October  
 Horne Lecture Theatre,  
 Level 12 Ward Support Block  
 Wellington Hospital

Paul Groot is professor of astronomy at Radboud University, located in Nijmegen, The Netherlands. He obtained his PhD in 1999 at the University of Amsterdam, among others on the first detection of optical afterglows from gamma-ray bursts. After a stay at the Harvard-Smithsonian Center for Astrophysics as a CfA fellow he returned to The Netherlands in 2002 to co-found the Department of Astrophysics at Radboud University. He served as chair of the Department from 2006 - 2016 and as chair of the Netherlands Research School for Astronomy (NOVA) from 2012 - 2016. In this role he played a very active role in setting the research and instrumentation strategy for Dutch astronomy.

His research is focused on compact binary systems, transients in the Universe and gravitational wave astrophysics. He has a keen interest in astronomical instrumentation, among others as Project Scientist on the VLT X-Shooter spectrograph and Principal Investigator on both the MeerLICHT telescope and the BlackGEM array. He is a member of the Virgo Collaboration for the detection of gravitational wave signals.

He is the co-recipient of the 2002 EU Descartes Prize, the 2016 Breakthrough Prize in Fundamental Physics and the 2016 Gruber Prize in Cosmology.

The direct detection of gravitational waves by the LIGO and Virgo laser interferometers has opened a completely new field in astrophysics. The merger events of binary black holes and neutron stars have now been detected. The electromagnetic radiation from one event (GW170817) has also been detected in a world-wide effort by thousands of astronomers. After the current upgrades the LIGO/Virgo detectors will detect a gravitational wave signals at a likely rate of one per week. This amazing development also raises many questions and opens up new opportunities: How do these binary black holes form? Where and when were they formed? How do they link to massive stars? Are they really the production site of gold in the Universe. What is the highest and lowest mass black hole? What are neutron

stars made up of? Can we find these events even without gravitational wave signals, by looking at short duration transients in the optical sky?

During the lecture Dr Groot will give a short overview of the amazing results obtained so far and look ahead to the new possibilities for understanding black holes, neutron stars and the violent Universe.

### **Beatrice Hill Tinsley**

Beatrice Hill Tinsley was a Professor of Astronomy at Yale University when she died, aged 40, of melanoma in 1981. Until she came on the scene, people believed that galaxies were fixed, immobile and unchanging in the universe. She discovered (among many other things) that galaxies are both changing and interacting with one another. She proved that the universe is still evolving.



Born in England, her family came to New Zealand when she was 5. She was educated first in New Plymouth and then at the University of Canterbury. In 1961 she married Brian Tinsley. In 1963 they travelled to the USA, where they remained

Beatrice was celebrated for her work as a synthesiser, the bringing together of apparently unrelated and individual scraps and strands of knowledge and theory, to help create a whole.

These Beatrice Hill Tinsley Lectures are our way of celebrating the life and work of this extraordinarily appealing and altogether remarkable young woman.

The Beatrice Hill Tinsley Lectures are administered by the RASNZ Lecture Trust who may be contacted by email at [lecturetrust@rasnz.org.nz](mailto:lecturetrust@rasnz.org.nz)

Seating is limited so please register for your free ticket

---

at <https://www.eventfinda.co.nz/2018/the-dawn-of-gravitational-wave-astronomy/wellington>

Parking is available at the Wellington Hospital public parking and on Mein St.

**WAS Observing Evening** - Saturday 13th October, 8:00 pm, Tawa College.

See many wonderful objects, star clusters, galaxies, dying stars and nebulae. We will be focusing on the area around Galactic Centre of the Milky Way which lies across the night sky. The planets 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.

**International Observe the Moon Night** - Saturday 20th October, 8:00 pm, Wellington waterfront by the bridge near the entrance to the lagoon.



International Observe the Moon Night is a worldwide celebration of lunar science and exploration held annually since 2010. One day each year, everyone on Earth is invited to observe and learn about the Moon together, and to celebrate the cultural and personal connections we all have with our nearest neighbour.

The event occurs in September or October, when the Moon is around first quarter. A first quarter Moon is visible in the afternoon and evening, a convenient time for most hosts and participants. Furthermore, the best lunar observing is typically along the dusk/dawn terminator, where shadows are the longest, rather than at full Moon.

**New Zealand Astrophotography Weekend 2018** - December 7th - 9th, 2018, Foxton Beach Bible Camp, Foxton Beach, Horowhenua.

---



The Horowhenua Astronomical Society is hosting the sixth New Zealand Astrophotography Weekend. Held in the lower North Island it is an annual event dedicated to astrophotography in a wonderful dark-sky location. It is open to everyone interested in astrophotography - from beginners to advanced. Come along and share your knowledge, tips and experiences.

All sorts of astrophotography can be undertaken - solar-system / nightscapes / deep-sky.

The weekend shall consist of:

- Practical astrophotography. There are plenty of safe areas for people to set up their equipment and leave it in situ for the whole weekend.
- Image Processing: There is a huge room with long tables available which is perfect for people to set up computers. If you have one then please bring an external monitor to attach to your laptop as this is very useful for other people to observe what you are doing.
- Presentations: There shall be talks on astrophotography related topics held in the large hall (see below).
- Bring-and-buy: Feel free to bring along any equipment that you are no longer using and wish to sell.
- Fish and chips dinner: Saturday night. Please pay when you book.
- Late-night movies: Should the weather not be kind then movies can be shown on the big screen.

Everyone is encouraged to bring along their own telescopes / mounts / cameras etc, however basic they might be.

For more information and booking details go to

<http://www.horoastronomy.org.nz/upcoming-events/astrophotography-weekend>

---

### 3. SOCIETY NEWS

#### 2018 – 2019 Subscriptions

We started the new Financial Year on the 1st September. Membership subscriptions are now due. Please continue supporting our Society's activities by renewing your membership. As part of our mission of promoting astronomy through education and public outreach, we endeavour to keep our activities free for everyone to attend.

However, as a Society, we do retain a number of fixed costs. Every year we pay out for insurance, affiliation to the Royal Astronomical Society of NZ, post-office box, venues and costs incurred when we host an international speaker, and telescope equipment. We are also looking to fund a solar telescope as part of our outreach programme.

Your commitment to supporting our Society through renewing your 2018 – 2019 subscription is very much appreciated.

Renewal forms can be found on the website, but a summary follows:

- Adult/Waged: \$50.00
- Student/Unwaged: \$30.00
- Associate (outside the Wellington region): \$20.00
- Family: \$70.00

Payment methods:

- Direct Deposit or Internet Banking - use Acc No: 03-0502-0508656-00, please include reference so we know who is making the payment
- Cheque - make out to Wellington Astronomical Society Inc, and mail to PO Box 3181, Wellington 6140
- Cash - please bring exact amount to meeting.

#### Annual General Meeting - 7th November

As we approach our next AGM, we are looking for more **members to join the Council**. If you are interested in being more involved with the Society's activities and help steer the future direction of the Society, please put your hand up and let us know. You are free to come along and join in our Council meetings 5:30 – 6:45pm on the 1st Wed of the month at Space Place, prior to our monthly Society meeting.

We are also looking for someone to take over the role of the **Newsletter Editor**. The person has the responsibility for producing the Society newsletter once a month (except for January). As can be seen, the format is straightforward with a template set up in MS Word. Essentially it is taking a copy of the previous month's newsletter and updating it with the latest events and astronomy news. It takes a few hours a month to complete with

---

most of the information supplied by others. The Newsletter Editor is a position on the Society's Council.

Please contact Antony (President) or any other Council member if you are interested in the Newsletter Editor position or have any questions about being a Council member.

**Nominations for Council positions** have to be received no less than 10 days prior to the AGM. Nominations are required to be signed by a mover and a seconder.

**Resolutions to be moved at the AGM** have to be received 28 days prior to the AGM. Resolutions are required to be signed by the mover and a seconder.

Names of the candidates for Council, any resolutions and a statement of performance will be sent out to all members 7 days before the AGM.

### **WAS joins a Global Network to Monitor the Sky Brightness evolution.**

Astronomers across the globe are concerned with light pollution, especially in our urban environments and when the WAS council was recently approached to assist in the global <http://tess.stars4all.eu/> project, we were happy to join.



Carlos Tapia Ayuga at the Astrophysics department of the Universidad Complutense de Madrid in Spain asked that we install one of their internet-enabled TESS-W photometers to monitor the sky brightness evolution with time.

---



The unit was installed at the Gifford observation in Wellington city centre and is actively contributing sky quality and cloud cover data. This is the first unit of its type to be deployed in New Zealand and completes their 24hr coverage for their global sensor network.

The sensor data is available in near real-time for all to view on their site: [http://tess-dashboards.stars4all.eu/d/I\\_akY0Fmz/s4a-photometer-network-new-zealand?orgId=1](http://tess-dashboards.stars4all.eu/d/I_akY0Fmz/s4a-photometer-network-new-zealand?orgId=1)



## Telescope for sale

NZ homemade 8 inch (200 mm) Dobsonian telescope. If you are interested please contact Dave McCarter at [astronomizer@gmail.com](mailto:astronomizer@gmail.com). You can find out more about Dave at [http://www.imagiverse.org/interviews/davemccarter/dave\\_mccarter\\_15\\_02\\_03.htm](http://www.imagiverse.org/interviews/davemccarter/dave_mccarter_15_02_03.htm)



---

#### 4. ASTRONOMY NEWS

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



“The General Assembly declares 4 to 10 October World Space Week to celebrate each year at the international level the contributions of space science and technology to the betterment of the human condition”

*UN General Assembly resolution, 6 December 1999*

The choice of dates was based on recognition of two important dates in space history: the launch of the first human-made Earth satellite, Sputnik 1, on October 4, 1957; and the signing of the Outer Space Treaty on October 10, 1967.

Since its United Nations declaration in 1999, World Space Week has grown into the largest public space event on Earth. More than 3,700 events in 80 countries celebrated the benefits of space and excitement about space exploration in 2017.

---

The theme for UN-declared World Space Week 2018 will be **“Space Unites the World,”** and 2019 theme “The Moon: Gateway to the Stars.”

“World Space Week, October 4-10, 2018 will celebrate the role of space in bringing the world closer together,” said WSWA President Dennis Stone.

The theme is inspired by UNISPACE+50, an historic gathering of world space leaders which will occur in 2018. UNISPACE+50 will promote cooperation between spacefaring and emerging space nations and help space exploration activities become open and inclusive on a global scale, according to the UN.

WSWA Executive Director Goran Nikolašević said, “World Space Week 2017 broke records with over 4,000 events. Most events were held in countries which are not top space-faring nations, showing the strength of World Space Week in the developing world.”

“Rapid growth of World Space Week reflects widespread acceptance of this synchronized timeframe to celebrate space, inspire students using space, and promote space programs, policies, and organizations,” Stone said. WSW is celebrated by a network of over 1,000 space-related organizations, the largest such network in the world, according to WSWA.

The Association’s Board each year selects a theme for World Space Week to provide a focus of the activities and events that take a place in over 80 nations during 4-10 October. WSW event organizers are encouraged to incorporate the theme into their activities and promotional materials.

To see the history of World Space Week themes, please click [here](#).

### **About World Space Week**

The largest space event on Earth, UN-declared World Space Week is celebrated October 4-10 annually. It is an international celebration of the contribution of space science and technology to the betterment of the human condition. World Space Week consists of a myriad of space-related events held by space agencies, aerospace companies, schools, planetaria, museums, and astronomy clubs in a common timeframe to achieve greater student and public impact through synchronization.

### **About World Space Week Association**

World Space Week Association is the global coordinator of World Space Week. WSWA is an international non-government, non-profit organization incorporated in the United States in 1982. It is led by a Board comprised of global space leaders and dignitaries, an executive team that manages operations, and volunteers that support them. The Association is permanent observer on the UN Committee on the Peaceful Uses of Outer Space and is supported by voluntary contributions of sponsors including Lockheed Martin.

---

---

## 5. NIGHT SKY FOR OCTOBER 2018

The [Night Sky for October 2018](#) courtesy of the University of Canterbury.

---

## 6. CONTACTS

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

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

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

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

Treasurer: John Homes

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

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

Telescope custodian: Chris Monigatti

Council: Andrew Fuller, Chris Monigatti, Frank Andrews, Janine Bidmead, Murray Forbes, Peter Woods, Roland Idaczyk

Postal Address:

Wellington Astronomical Society,

PO Box 3181,

Wellington 6140, New Zealand

Website: [www.was.org.nz](http://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)

---