

# Australasian Society for General Relativity and Gravitation President's Report 2022-2023 Wednesday 29 November 2023

#### **Committee 2022-2023**

• President: Krzysztof Bolejko (University of Tasmania)

• Past President: Jörg Frauendiener (University of Otago)

• Treasurer: Karl Wette (Australian National University)

• Secretary: Malcolm Anderson (University of Brunei Darussalam)

• Member: Susan Scott (Australian National University), David Wiltshire (University of Canterbury)

I would like to thank all the Committee Members for their time and efforts in the past two year in support of the Society. Particular thanks are to David Wiltshire who will be stepping down after many years of service.

# Past challenges and Planned Activities for 2024-2025

The COVID pandemic had a impact on activities of our Society, but we are slowly seeing a return to normal activities. After years of primarily online interactions the ACGRG is finally is bringing our community together. The purpose of the ASGRG is to provide a regional forum for members to discuss general relativity and to foster links between related societies. The year 2024 will bring new opportunities, with 30th anniversary of the ASGRG (Canberra), the AIP Congress (Melbourne) and possible online interaction, such as for example monthly or or bi-monthly ASGRG online seminar series.

# Australasian Conference on General Relativity and Gravitation

The ASGRG held its 11th Conference on General Relativity and Gravitation in Hobart from 2-4 February 2022. Originally, hoped to take place in a hybrid form, it was almost entirely online due to the pandemic. The conference featured nine invited talks and a public talk by Sir Roger Penrose. The Kerr prize for the best student talk was split and awarded to two students: Ben Grace (Australian National University) and Lucy Strang (University of Melbourne). Due to the fact that the 11th ACGRG was held primary online, it was decided that the next Conference on General Relativity and Gravitation would be held again in Hobart in 2023.

The 12<sup>th</sup> ACGRG was scheduled for 27 November − 1 December 2023, and the Biennial General Meeting for 29 November 2023. The 13<sup>th</sup> ACGRG is planned to take place in 2025 in Christchurch and it will be organised by the University of Canterbury.

# **AIP Congress 2022 in Adelaide**

The AIP Congress featured two regular and one focused session related to gravitational physics. The ASGRG sessions took place on Monday 12th December 2022, and the focused session Australia's future in gravitational wave physics and astrophysics took place on Thursday 15th December 2022. The next AIP Congress will take place in 2024 in Melbourne.

# ASGRG's 30th anniversary

Next year, the Society will celebrate its 30th anniversary. The Society was formed at a meeting of mathematicians and physicists in Canberra in September 1994. There are plans to celebrate this with a mini-meeting most likely in hosted by ANU in Canberra.

### **Prizes for members**

- In July 2022, Susan Scott and Matt Visser were selected as Fellows of the International Society on General Relativity and Gravitation.
- Susan Scott was awarded the Blaise Pascal Medal for Physics 2022: the award recognised Susan's work over three decades, including discoveries in general relativity, cosmology and gravitational wave science.
- In 2022 Susan Scott was awarded the AIP Walter Boas Medal at the AIP Congress in Adelaide.
- In 2022 Susan Scott received the Distinguished Alumni Award, Monash University Faculty of Science.
- In 2022 Susan Scott was awarded Walter Burfitt Prize by the Royal Society of New South Wales.
- In 2023 Susan Scott received the Thomas Ranken Lyle Medal, Mathematics & Physics, Australian Academy of Science.
- In July 2023, David Wiltshire was awarded the Dan Walls Medal. The Dan Walls Medal is presented biennially to the physicist working in New Zealand. David Wiltshire was awarded for his significant contributions to gravitational physics and cosmology.

Please join me in congratulating them on their success and the recognition they deserve.

### **OzGrav Centre of Excellence**

The Australian Research Council Centre of Excellence for Gravitational Wave Discovery will finish its 7-year operation this year on 31 March 2024. In November 2022, the ARC Centre of Excellence for Gravitational Wave Discovery has been awarded a further \$35 million in funding to continue their operation for another 7 years under the brand of OzGrav 2.0. The OzGrav 2.0 activities will focus on: mulitmessanger astronomy with putting emphasis on follow-up electromagnetic observations of the GW events; testing general relativity with black holes and pulsars; understanding properties of ultra-dense matter with neutron stars mergers; and mapping the universe with gravitational waves and fast radio bursts.

# ASA Chapter Time Domain Astronomy

In July 2023, the Astronomical Society of Australia formed a new Chapter called Time Domain Astronomy. The TDA aims to enhance collaborations, coordinate detections and observations, and follow-up investigations of the Time Domain events. Its aims therefore overlap with some research interests of the ASGRG members.

# **AIP Council Meetings**

I represented ASGRG at the Australian Institute of Physics Council Meetings C74 (14-17 February 2022) and C75 (1-3 February 2023). Both meetings took place on Zoom. During the meeting I presented short repents on the ASGRG activities.

# **Membership**

Currently the ASGRG has 64 life members and 1 non-life member.

### The ASGRG Committee for 2023-2024

The committee for the next two yests will be will be

- President: Krzysztof Bolejko (University of Tasmania)
- Treasurer: Karl Wette (Australian National University)
- Secretary: Malcolm Anderson (University of Brunei Darussalam)
- Member: Susan Scott (Australian National University), Jörg Frauendiener (University of Otago), Chris Stevens (University of Canterbury), Carl Blair (University of Western Australia).

It has been a privilege and a pleasure serving as the President of the ASGRG over the last two years, and I look forward to the next two years in office.

Krzysztof Bolejko
ASGRG President