



# ASTRONOMICAL SOCIETY OF AUSTRALIA

*Incorporated in the ACT*  
ABN 37 660 297 848

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## **President's Report for 2022/2023**

**Wednesday 5th July 2023**

### **1. Council 2022-2023**

John Lattanzio	President
Stas Shabala	Vice President
Cathryn Trott	Immediate Past President
John O'Byrne	Secretary
Marc Duldig	Secretary
Yeshe Fenner	Treasurer
Richard de Grijs	Councillor
Richard McDermid	Councillor
Barbara Catinella	Councillor
Sarah Pearce	Councillor
Bernhard Mueller	Councillor
Alma Sebastian	Student Representative
Stas Shabala (in 2022)	Chair, PASA Editorial Board
Ivo Seitzzahl (in 2023)	Chair, PASA Editorial Board
Tanya Hill (Co-opted)	Prizes and Awards Co-ordinator
Michael Brown (Co-opted)	Media and Outreach Co-ordinator

I would like to thank all Council members for their time and efforts in the past year in support of the Society. Particular thanks are due to the Council members holding ongoing roles in the Society (John O'Byrne, Marc Duldig, Yeshe Fenner, Ivo Seitzzahl, Tanya Hill, Michael Brown).

Heartfelt thanks to Gary Da Costa for continuing in his role as our “Public Officer”.

Thanks also to our previous and new Chapter Chairs:

ANITA Chair: Ilya Mandel  
ECR Chair: Henry Zovaro (who replaced Nichole Barry)  
EPOC Chair: Jackie Bondell  
GAP Co-Chair: Mark Krumholz (who replaced Alexander Heger;  
there is also an AIP Co-Chair: Celine Boehm)  
IDEA Chair: Devika Kamath (who replaced Katie Jameson)  
SWG Co-Chairs: Themiya Nanayakkara and Clancy James  
CWG Chair: Vanessa Moss

A special thanks to Deb Gooley who has continued to provide excellent administrative support for the ASA.

## **2. Challenges**

The Covid pandemic continues to affect our community but we are slowly seeing a return to more normal activities. After years of primarily online interactions the ASA is bringing our community together now that it is reasonably safe to do so. Hence the 2023 meeting has a theme of bringing us together.

The rapid changes in the publishing landscape are being monitored by the ASA Council and in particular the PASA Editorial Board and its Chair, Ivo Seitzzahl. It is likely that PASA will have to move to a fully Open Access model in the next few years. This will be discussed during the PASA report and the input of ASA members is critical to this discussion.

The change of Government has seen much activity on re-assessing Australian science priorities, the role of the ARC and the details of the ERA research assessment. The ASA has made submission to each of these reviews and we can expect some changes during the term of the present government.

With April gifting us with a total solar eclipse, the Society was involved in outreach and education concerning the safe viewing of the eclipse. We acknowledge excellent advice from Associate Member Mr Terry Cuttle, including promotion of the use of safe eclipse viewing glasses. We were disappointed to discover that ARPANSA and the WA Dept of Health adopted an exceptionally conservative view, advising people not to view the eclipse directly, and that even using eclipse glasses was very dangerous. We repeatedly contacted them about the recently developed international standard for eclipse glasses and the empirical safety record found from their use in 2017 in North America. We had only limited success, although the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) worked with us to promote safe use of eclipse glasses. As of the time of writing the RANZCO are aware of only 5 cases of eye injury resulting from the eclipse.

### **3. Highlights**

Despite the challenges of the past year, there are clear highlights to note:

- Last year we initiated the IDEA Community Fund as a way of supporting members through difficult times. This replaced the COVID fund, but is far more general and has few restrictions. In the last year we supported one request for \$1190.
- The ASA, together with Australian Research Data Commons (ARDC), has instituted the “Emerging Leaders in Astronomy Software Development Prize” to recognise the importance of software to modern research. It is also hoped to promote the acceptance of software as a significant output of research, equally as important as the more traditional publications. The first Prize will be awarded at the 2023 ASM dinner. Thanks to the ECR Chapter for their work on this.
- ASA members were recognised through various awards and prizes, as detailed below.
- PASA has continued to increase its Impact Factor, reaching 6.51, which places it ahead of traditional leaders such as ApJ, AJ, MNRAS, A&A.
- We have usually had a meeting of Heads of Astronomy Departments and Facilities as part of the ASM. However, with the ESO bid coming up soon it was decided to have more regular (zoom) meetings so that all Heads are on the same page and we can efficiently communicate and share information. Although inspired by the upcoming ESO bid, it has proven useful for other discussions also.
- The ASA has formed a Communications Working Group to investigate better ways of enabling efficient communication within the ASA and its various groups (Chapters, Working Groups, Council, ASM LOC, etc). Their first activity has been to set up an ASA Slack and associated channels. Many thanks to the CWG, and especially Vanessa Moss, for their work on this initiative.
- Solar Eclipses: Australia will see 5 total solar eclipses in a 15-year period; the first was April 2023. We have set up a website to inform the public about eclipses and to encourage safe ways of viewing them. We hope to work with ARPANSA and the RANZCO with regard to promoting the safe use of Eclipse Glasses. Sincere thanks to Terry Cuttle (ASA Associate member) for his help with this complex task.
- The ASA will set up an Eclipse Working Group to continue (and extend) the message and maximise publicity and enjoyment of the upcoming eclipses. The next one, in 2028, passes directly over metropolitan Sydney and totality lasts for 4 minutes!

### **4. New ASA Chapter: Time Domain Astronomy**

At the 151<sup>st</sup> ASA Council meeting on Sunday we formally approved a new ASA Chapter on Time Domain Astronomy (TDA). This is one of the fastest growing areas of astronomy, and the new Chapter will help coordinate observations, instrumentation, theory, follow-up investigations, and community integration to advance collaborative research in TDA. Please look out for an email on the ASA exploder in the coming weeks that will contain more information about joining the chapter.

### **5. Code of Conduct and Equity and Conduct Committee**

It is the policy of the Astronomical Society of Australia (ASA) that all participants in its activities are able to enjoy an environment that is free from discrimination and harassment, and that its members conduct themselves appropriately during all professional activities. Council has previously convened an Ethics and Conduct Committee (ECC). The ECC is charged with oversight of the ASA Code of Conduct and Statement of Ethics as well as handling of potential breaches. There have been no investigations required from the ECC in the last 12 months.

## **6. Awards and Honours**

Members of the ASA were recognized with several awards over the past 12 months:

- Professor Matthew Bailes (Swinburne U) shared the [2023 Shaw Prize in Astronomy](#) for the discovery of Fast Radio Bursts. The citation reads:

*The Shaw Prize in Astronomy 2023 is awarded in equal shares to **Matthew Bailes**, Director of the Australian Research Council (ARC) Centre of Excellence for Gravitational Wave Discovery, **Duncan Lorimer**, Professor and Interim Chair of Physics and Astronomy and Associate Dean for Research at Eberly College of Arts and Sciences at West Virginia University, USA and **Maura McLaughlin**, Eberly Family Distinguished Professor at the Department of Physics and Astronomy and Director of the Center for Gravitational Waves and Cosmology at West Virginia University, USA for the discovery of fast radio bursts (FRBs).*

Matthew is well known to ASA members, having founded the Centre for Astrophysics and Supercomputing at Swinburne in 1998. and served as its Director for the first 12 years. He was elected as a Fellow of the Australian Academy of Science in 2022 and has been Director of the ARC CoE OzGrav since 2016. Congratulations Matthew.

- Professor **Joss Bland-Hawthorn**, from the University of Sydney School of Physics and Director of the Sydney Institute for Astronomy, has been elected as a member of the American Academy of Arts and Sciences. Congratulations to Joss.
- No fewer than **five** ASA members were announced in the 2023 list of SuperStars of STEM prepared by Science and Technology Australia (STA). Congratulations to:
  1. Vanessa Moss: “Radio astronomer Dr Vanessa Moss uses AI to automate telescopes so we can better explore our place in the Universe.”
  2. Sarah Webb: “Astrophysicist Dr Sara Webb who uses AI to explore the universe and beyond.”
  3. Laura Driessen:” Radio astronomer Dr Laura Driessen - a scientist searching for stars using Australia's biggest radio telescope.”
  4. Adelle Goodwin: “Astrophysicist Dr Adelle Goodwin - a scientist who studies what happens when stars are destroyed by supermassive black holes to better understand our Universe.”
  5. Mars Buttfield-Addison: “Computer Scientist Mars Buttfield-Addison who is monitoring space debris using machine learning.”
- Three Australian Honours were given to astronomers or people involved in astronomy.
  1. ASA member Professor Matthew Colless AO was awarded an Order of Australia in the Australia Day announcements.

The citation reads: For distinguished service to scientific research, particularly to astronomy and astrophysics, and to professional societies.

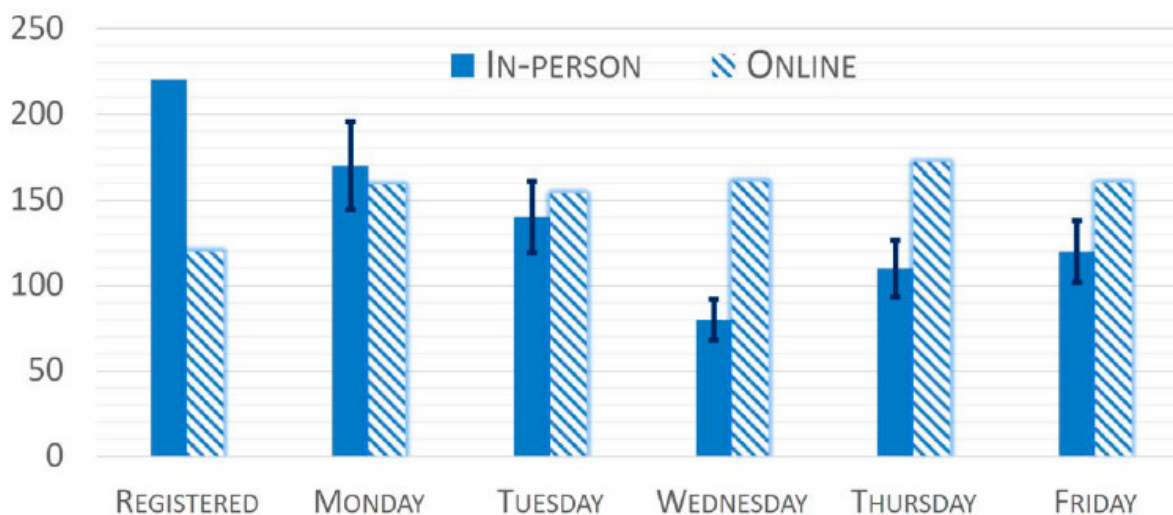
2. Dr Andrew Stevenson PSM from DISR was awarded the Public Service Medal in the King's Birthday Honours. Andrew has been a regular and important supporter of astronomy and an enthusiastic contributor to the ESO Coordinating Group and our bid to join ESO.

The citation reads: For outstanding public service through leadership and stewardship of Australia's astronomy capability.

3. Former student member Donna Burton OAM was awarded a Medal of the Order of Australia "For service to science, particularly astronomy."

## 7. ASA Meetings

**The Annual Scientific Meeting:** The 56<sup>th</sup> Annual Scientific Meeting (ASM) was held in "hybrid" mode, hosted by the University of Tasmania, from June 27-1 July, 2022. There were three in-person hubs in Hobart, Perth and Brisbane, and everything was also available online. Plans for more hubs were curtailed due to lower numbers, although unofficial hubs continued in Adelaide and Canberra. To maximise options for ASA members the organisers used 6 content-delivery mode: in-person, zoom, slack, gather, website, vimeo. Over 300 people attended, either in person or online, and over 100 talks were delivered. The SOC and the LOC were chaired by Krzysztof Bolejko, and ably assisted by various local Hub contacts and a large SOC. Unfortunately, the seemingly ubiquitous Covid spread through a substantial fraction of people in Hobart, with the result that in-person attendance declined during the week while online access increased.



The ASM featured 19 science sessions, 3 special sessions, 1 focused session on *Space and Astronomy*, prizes session, 2 town-hall meetings, 5 chapter lunches, 1 working group tea, 1 public lecture, and the ASA's annual general meeting. Some 19 awards were presented during the ASM.

Prizes for student presentations at the ASM were awarded to the following:

#### Best student posters

- 1st Prize: Ellie Lietinger for the poster titled "A spatially complete view of multiple stellar populations in Galactic globular clusters"
- 2nd Prize: Kateryna Andrych for the poster "Second-generation proto-planetary disks around evolved binary stars"
- 3rd Prize: Elli Borchert for the poster "On the rise times in FU Orionis events"

#### Best student talks

There were many high quality presentations and the judges found it hard to separate them.

- 1st Prize (shared): Nataliea Lawson for her talk "When You Wish Upon A Planet: The Encapsulating Tail of KELT-9b"
- 1st Prize (shared): Callan Wood for the talk "Time-Resolved VLBI Imaging of Jet Launching in an X-ray Binary"
- 3rd Prize (shared): Andrei Ristea for the talk "Stellar-gas kinematic misalignments as a probe of external processes shaping galaxy evolution"
- 3rd Prize (shared): Teagan Clarke for the talk "All binary black hole mergers may form dynamically: the eccentric perspective"
- 3rd Prize (shared): Kat Ross for the talk "Looking through rainbow coloured glasses: The importance of spectral coverage in variability surveys"

#### Best student video poster

- 1st Prize (shared): Simon Lee for the poster-video titled "Towards a Network of Cherenkov Telescopes"
- 1st Prize(shared): Kirsten Banks for the poster-video "Investigating the spectro-seismic connection of giant stars"
- 3rd Prize: Elli Borchert for the poster-video "On the rise time of FU Orionis events"

The Harley Wood School of Astronomy (HWSA) was held as an in-person event from 24 to 26 June in Spring Bay Mill in Tasmania, attracting 64 students. Unfortunately, there was a problem with the shared sleeping arrangements at the HWSA which regrettably distressed many participants. The ASA investigated to determine how this happened, and in short it was a series of communication problems which resulted in last minute decisions being made that were not appropriate. The ASA Council is presently in the process of updating its guidelines for the HWSA organisers to ensure that similar problems will not happen again.

I want to acknowledge the efforts of Krzysztof Bolejko, and his thorough final report from which much of this information was taken.

The Harley Wood Lecture took place on the 29 of June and was delivered by Geraint Lewis. Professor Lewis was awarded the ASA David Allen Prize in 2021 for his exceptional achievement in astronomy communication, but due to COVID restrictions the award was not presented in 2021. The David Allen Prize was officially presented to Geraint Lewis in 2022, before the Harley Wood Lecture. The Harley Wood lecture was titled "Adventures in the Dark-Side of the Universe" and was dedicated to dark matter and dark energy.

**The 2023 ANITA Workshop:** this was held in hybrid mode, at the University of Adelaide and over zoom from Feb 8 to 10. See section 15 below for more information. This was a joint presentation of ANITA and the GAP Chapter.

**The ANITA Summer School for 2023:** this was on the topic of “Astro-particle Physics and Extreme Transits”. It was held on Feb 6 and 7 at the University of Adelaide, again with some participants joining over zoom. This was a joint presentation of ANITA and the GAP Chapters.

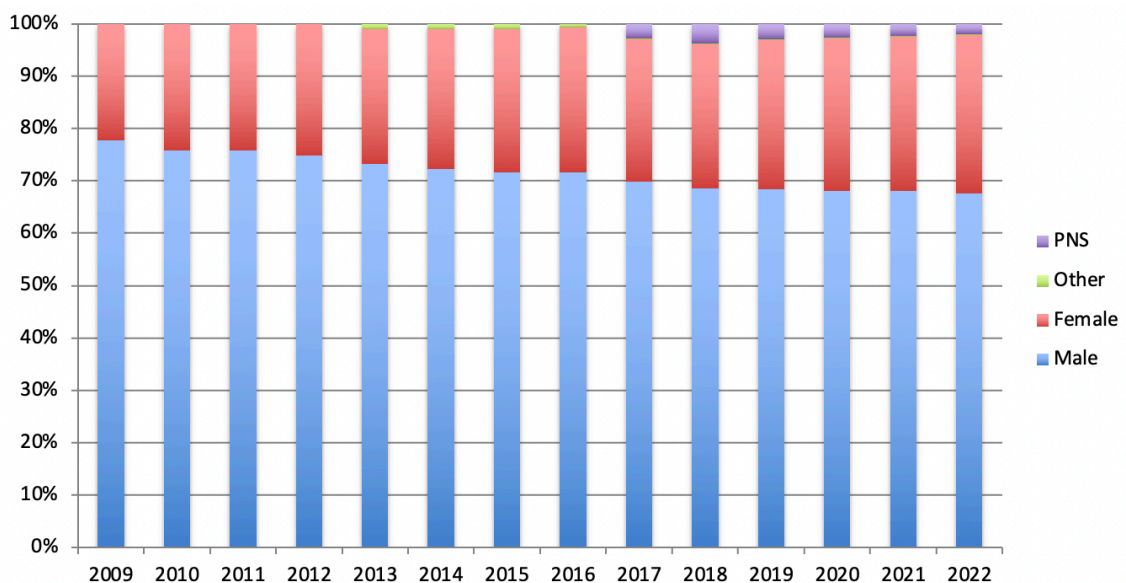
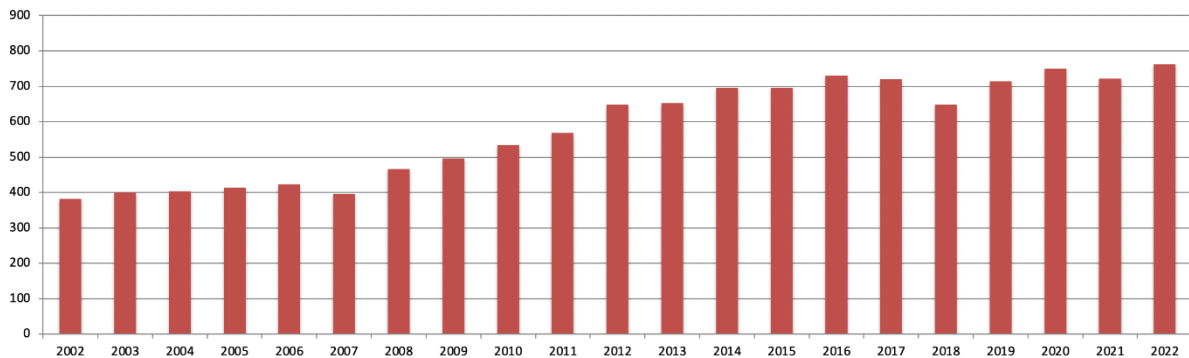
**GAP meetings:** GAP was co-organiser of the ANITA Workshop and Summer School in 2023.

### **8. ASA membership**

The ASA membership has increased by 22 over the past 12 months. Membership numbers are now 784 - these are all classified as ‘Active’ but around 110 have payments overdue, of whom 50 are more than 18 months overdue (and will be removed shortly if they remain unfinancial). One reason for being overdue would be a failure of automatic payment from credit cards, usually because the card has expired.

The gender breakdown is 241 (F), 524 (M), 2 (Other), 17 (Prefer not to say). The graphs below show the historical data. The percentage of female members is just over 30% and slowly increasing.

‘Prefer not to say’ includes Corporate members. An offer for institutions to sign up as Corporate members at no cost was made earlier this year but has not yet been reflected in these figures.



We note the passing of the Rev Robert (Bob) Evans OAM. Bob won the 1986 Page medal and was the Harley Wood lecturer in 1999. His OAM citation reads “In recognition of service to science, particularly astronomy.” Bob discovered 49 supernovae, 42 of them visually with his telescope that he described as “...of dubious and elementary construction.” Bob received many awards, including the Centenary Medal of the Societe Astronomique de France, and honorary membership of the Royal Astronomical Society of Canada. Australian Sky & Telescope published an informative [obituary](#) for him.

Professor P A (“Pip”) Hamilton AM passed away on 3 June. He was elected to the ASA Council in 1982 and served three consecutive terms as a Council member. Professor Hamilton was critical in the development of the 26m radio telescope at Mt Pleasant, near Hobart. He was also instrumental in the early development of computing at the University of Tasmania, especially the first mainframe computer acquisition (an Elliott 503) which was jointly operated in the Physics Building by the University and the Hydro-Electric Commission. He was Head of the Physics Department and later the first Pro Vice-Chancellor (Research) before moving to Deakin University as Deputy Vice-Chancellor (Research).

And although never an ASA member, we note that the community lost Dr Ragbir Bhathal (UWS) who wrote many articles on the history of Australian astronomy and astronomers, and especially female scientists.

## **9. Honorary Fellow**

The ASA Council elected Professor Daniel Price, Monash University, to Honorary Fellowship of the Society. Daniel was Chair of the PASA Editorial Board in 2015-2017, and a member of the Editorial Board for some time prior to that. It was under his stewardship that the Impact Factor increased so dramatically. His leadership has helped place PASA amongst the top astronomy Journals, and we are all grateful to Daniel for his exemplary work.

## **10. Financial**

The ASA finances remain in a healthy position. Thanks to income from PASA we are enjoying a small surplus: about \$25,000 in 2022/23 but only about \$10,000 in 2023/24 (see the Treasurer’s Report for details). The decrease in our surplus is due to increased expenditure in various areas

- Increase in student support
- Increase in funds for Chapters
- Increase in payments to PASA Editorial Board
- Promotion of ASA Prizes
- Frozen membership fees for a few years

Given the current financial situation of the Society, the ASA Council has agreed to again keep the membership fees frozen for 2023/2024.

Given the healthy financial position, one important aspect of the upcoming Member Survey will be suggestions on how to use this money most effectively. In the past, the Society endeavoured to maintain sufficient funds to enable it to continue to publish PASA for about two years, in the event of a substantial drop in income. With PASA now generating money, this is no longer a concern. However, the publishing landscape is changing rapidly and we recognise the potential for using funds to support PASA during these changes, if required.



The Foundation for the Advancement of Astronomy has \$252,273 as of 31 Mar 2023. This charitable Foundation supports all the ASA Prizes. Donations are tax deductible.

## **11. Publications of the ASA (PASA)**

PASA has continued to see an increased volume of high-quality submissions. The 2021 Impact Factor (released in 2022) of 6.51 is an all-time high, placing it higher than MNRAS, ApJ, AJ, and A&A and many others (albeit with a lower volume of papers). Australian radio astronomy papers continue to largely drive PASA's surge in citations, with ASKAP and MWA related papers contributing most prominently.

The Editorial Board has changed, with Ivo Seitzzahl (UNSW Canberra) taking over as Editor-in-Chief, and Stas Shabala moving to the Immediate Past Editor-in-Chief. The new Deputy Editor-in-Chief is Minh Huynh (CSIRO).

The main issue facing PASA is the world-wide move to Open Access. Dr Seitzzahl will lead a discussion on this option during his report to the AGM.

We remind members that all PASA reviewers are eligible for a 30% discount on Cambridge University Press books.

## **12. ASA Prizes and awards**

The ASA Prizes and Awards Co-ordinator Tanya Hill collates gender and geographical statistics for ASA prizes to ensure that there is a good balance. For the 2023 prizes, the gender statistics are shown in the table below.

	Bok Prize	Heisler Prize	Webster Prize	Green Prize	Software
Total	11	8	4	7	8
% female nominations	18%	38%	50%	29%	25%
% female short-list	33%	50%	50%	33%	0%
Gender of winner	M	M	M & F	F	M

The Society expects that female candidates should comprise at least 30% (increased from previous expectations of 20%) of the nominations for each prize and encourages institutions to help achieve this goal. This figure matches the percentage of female members in the ASA. The percentage of female nominations is variable because of the relatively small total number of applicants, but the statistics over recent years are as follows:

Percentage of Female Applicants: female membership of the ASA is 30%

Prize	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Bok	18%	67%	46%	37.5%	61%	0%	29%	50%	83%	50%	0%
Heisler	38%	42%	18%	45%	38%	44%	43%	25%	40%	33%	25%
Webster	50%	50%	80%	50%	50%	100%	0%	0%	100%	33%	0%
Green	29%	33%	29%	40%	40%	50%	--	--	--	--	--
Software	25%	--	--	--	--	--	--	--	--	--	--

Many thanks to Tanya Hill for her oversight of the process, and to all of the judges of the awards.

Note that the ECR Chapter, with ARDC, have instituted the “Emerging Leaders in Software Development Prize” which was awarded this year for the first time.

The following prizes have been awarded during the 2023 Annual Scientific Meeting (ASM):

**Bok Prize** - outstanding research in astronomy or a closely related field, by an Honours student or eligible Masters student at an Australian university.

*William McDonald - The University of Western Australia*  
Honours Thesis Title: *Dissociation of Dark Matter and Gas in Cosmic Large-scale Structure*

William’s work, which involved running and analysing cosmological N-body/SPH simulations, is a significant contribution to our understanding of the dissociation of cold dark matter and gas in cosmic large-scale structure formation, with particular relevance to the Bullet cluster.

Two further theses were of extremely high quality and the Judges awarded them an Honourable Mention:

- Hank Hua (ANU) for his thesis “Neutron Star Physics from Gravitational Waves with Third Generation Detectors.” The judges noted that the thesis was a significant step towards exploiting continuous gravitational wave for probing neutron stars and the nuclear equation of state with future detectors.
- Ashna Gulati (U Sydney) for the thesis “Exploring Classical Novae with ASKAP”, with the judges noting that the author showed “great skill in analysing survey data, addressing both statistical properties of the nova population and detailed analyses of individual events”

**Charlene Heisler Prize** - most outstanding PhD thesis in astronomy or a closely related field, accepted by an Australian university

*Piyush Sharda - ANU (now at Leiden Observatory, The Netherlands)*

Doctoral Thesis: *The role of metals from molecular clouds to galactic discs*

The Judging Panel was very impressed with the sheer volume of very high-quality work – covering quite different topics – in Sharda’s thesis. Truly exceptional.

The judges also wanted to acknowledge with an Honourable Mention the thesis of Isobel Romero-Shaw (formerly of Monash, now at Cambridge, UK). The thesis was titled “Eccentricity in Gravitational-wave Transients –measurements and implications.” The judges commented that the thesis demonstrates skilful mastering of the no-doubt extremely technical and difficult GW-data analysis methods and the Bayesian inference.

**Louise Webster Prize** - outstanding research by a scientist early in their postdoctoral career

*Joint winner: Nichole Barry (Curtin)*

*“Improving the Epoch of Reionization Power Spectrum Results from MWA Season 1 Observations”, Barry, et. al. (2019) ApJ, 884, 1*

Dr Barry’s paper details the achievement of an almost order of magnitude improvement in the sensitivity of the Murchison Widefield Array radio telescope facility, enabling a new avenue of research into the early universe’s epoch of re-ionization.

*Joint winner: Sven Buder (ANU)*

*“The GALAH+ survey: third data release”, Buder et al. (2021) MNRAS, 506, 150*

Dr Buder’s paper represents the achievement of a comprehensive Galactic archaeology study with extensive spectral analysis providing key stellar parameters for over half a million stars, enabling a new range of research projects combining stellar ages, abundances and kinematics.

**Anne Green Prize** - significant advance or accomplishment by a mid-career scientist

*Michelle Cluver – Swinburne University*

Dr Cluver's award was given for contributions to the understanding and characterisation of galaxies in the infrared, through the WISE survey, and significant novel contribution to the field of galaxy evolution, specifically in demonstrating the power and versatility of WISE mid-infrared imaging to elucidate star formation history, the role of mass quenching, and the effect of environment, in galaxy groups.

**Emerging Leaders in Australian Astronomy Software Development** – for outstanding contribution to the development of open-source astronomical software by an early career researcher. This sponsored initially for 4 years by the Australian Research Data Commons (ARDC).

*Manodeep Sinha – Swinburne University*

The award is for the development of CORRFUNC, an open-source high-performance code to compute correlation functions extremely quickly.

The judges noted that Sinha's deep understanding and the code's extreme efficiency has enabled new research projects. Furthermore, the resulting code has been adopted by researchers around the world as the correlation function code of choice.

The ASA has again engaged the services of Science in Public to help promote the ASM and the Prizes. This resulted in a large amount of publicity in 2022. We continue to monitor this to evaluate its success.

### **ASA Certificate of Appreciation**

The ASA Council voted to present a Certificate of Appreciation to Mr Terry Cuttle (Associate Member and member of the Astronomical Association of Queensland) for his indefatigable work in promoting the April total solar eclipse. The Certificate reads: "*presented to Terry Cuttle in recognition of his outstanding achievements in education, outreach and publicity of the 2023 Total Solar Eclipse.*"

### **13. Inclusion, Diversity and Equity in Astronomy (IDEA) Chapter**

Devika Kamath is the Chair of IDEA (279 members), and their main work in the last year has been the biennial Pleiades Awards. This takes a significant amount of work and we are very grateful to IDEA for advancing this initiative, which is now highly regarded and sought by our community.

IDEA also started the Community Action Committee, with an aim to determine best practices for diversity, inclusion, and equity related issues in the community, which will be shared through the IDEA website. The initial focus has been on the ASTRO-3D hiring practice.

### **14. Education and Public Outreach Chapter (EPOC)**

Jackie Bondell is Chair of EPOC, which has 245 members.

The main EPOC activity for the last year was the coordination of the eclipse cruise speakers. Feedback from all participants, including speakers, was very positive. Useful contacts were made with P&O as well as senior editors and eclipse experts at Sky & Telescope. EPOC gained valuable experience in coordinating a large outreach program, which will likely be very useful for the upcoming eclipse activities, including specific events for the 2028 Sydney eclipse.

See also section 21 for more information.

### **15. Australian National Institute for Theoretical Astrophysics (ANITA)**

Ilya Mandel is Chair of ANITA, which has 247 members (67% male and 30% female, 3% other). Students comprise 42% of members.

The ANITA 2022 annual workshop was held in hybrid mode, from the University of Adelaide, from Feb 8 to 10, 2022. There were 80 registered participants, from more than 10 institutions, presenting 40 talks. Giulia Cinquegrana (Monash) was awarded the J-P Macquart Prize for

the Best Student Talk, along with a \$100 gift certificate. Elisabeth Borchert (Monash) received the runner-up award.

The ANITA 2022 Summer School was on “Astroparticle Physics” and was held on Feb 6-7 again at Adelaide, with some joining via zoom.

ANITA is again recording seminars on theoretical astrophysics, which are available on the ANITA YouTube channel. The Summer School talks are also available there. See the ANITA website for details.

## **16. Early Career Research Chapter (ECR)**

Henry Zovaro is the Chair of the ECR Chapter, which has 341 members, 60% male and 39% female, 2% PNTS (prefer not to say).

The main activity of the ECR Chapter was finalising the proposal from the ARDC for an award dedicated to the development of Astronomy Software. The ECR Chapter secured funding from the ARDC for the initial years, and developed the guidelines for the Award. The first presentation is this year; a total of 8 nominations were accepted.

In February they ran a speed meet-a-mentor event, and a second may be held later this year.

Further upcoming activities include a week-long workshop on Python programming, in partnership with ADACS. They are also planning an ECR Symposium Series consisting of 2-3 day visits by ECRs to various institutions, where colloquia will be delivered (and broadcast via zoom).

## **17. Group for Astroparticle Physics Chapter (GAP)**

This is our first joint Chapter, shared between the ASA and the Australian Institute of Physics (AIP). The original ASA Co-Chair Alexander Heger has been succeeded by Mark Krumholz. The Co-Chair from the AIP remains Celine Boehm. The Chapter has 78 ASA members.

GAP presented four parallel sessions at the 2022 December AIP Congress in Adelaide. They also collaborated with ANITA to present a joint ANITA.GAP workshop and Summer School (both also held in Adelaide, in Feb this year). They are planning a focus session at the AIP summer meeting in Canberra in December 2023 on the theme of synergies between gamma-rays and radio studies. They are also planning a GAP zoom seminar series later in this year, so watch out for that.

## **18. Sustainability Working Group (SWG)**

The SWG is a Working Group, rather than a Chapter, and does not have formalised reporting channels like the Chapters do. The Co-Chairs are Themiya Nanayakkara and Clancy James, and it has about 30 members. It was formed to advise the ASA on various issues related to sustainability and best practice in the area. The group has played a significant role in developing the 2024 ASM which will be delivered in an “online first” mode, that prioritises online access.

## **19. Communications Working Group**

The ASA Communications Working Group (CWG) was established in 2022 as part of an initiative by the ASA Council to broaden and augment communication within the ASA membership, in particular with respect to leveraging technology where relevant. The initial remit of the CWG has been to set up and define guidelines for the ASA Slack space, which it currently takes responsibility for administering. The Chair is Vanessa Moss, and those interested in the activities of this WG can contact her or register their interest via the ASA/CWG webpage.

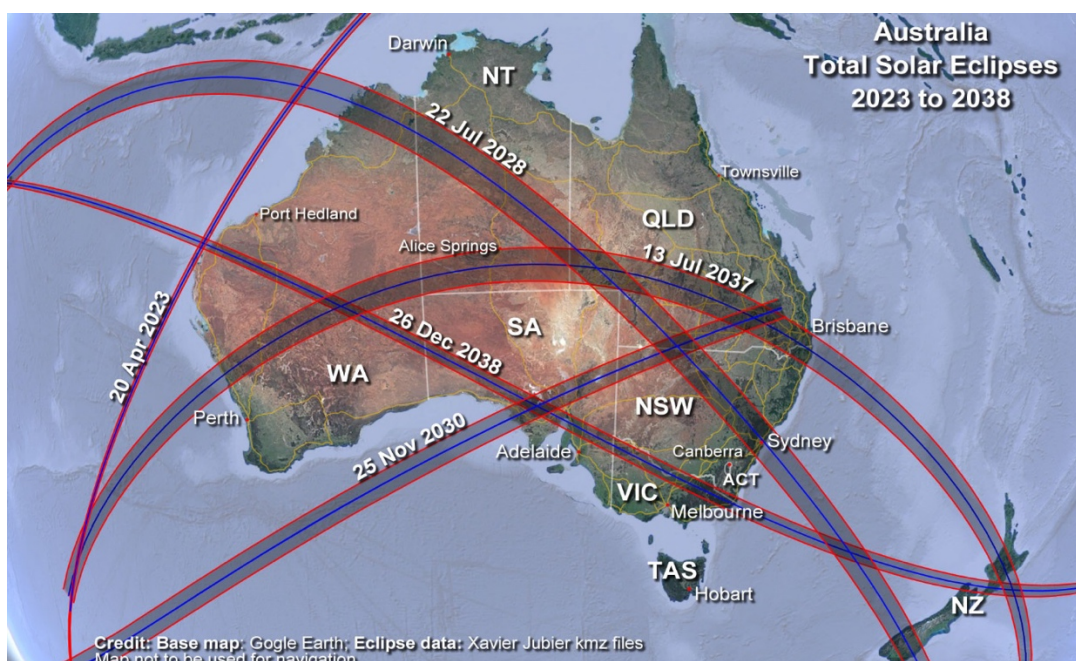
## **20. Designated Observatories**

The ASA has been requested by Standards Australia to maintain a list of *designated* optical observatories that are judged to be valuable resources for (i) research, (ii) education and (iii) community use. Acceptance as a designated observatory does not imply any form of legal status, but it should enhance a case for protection against obtrusive lighting. Two observatories were added to the list in the past year:

- Dorothy Hill Observatory
- Gondwana Stars Observatory - Australian Age of Dinosaurs Museum of Natural History

## **21. Upcoming Eclipses and Eclipse Working Group**

April 2023 saw the first of 5 total solar eclipses that will be visible in Australia over the next 15 years. We have set up a [website](#) to inform the public about eclipses and to encourage safe ways of viewing them. ARPANSA and the WA Govt seem to be quite out of date with regard to the safe use of Eclipse Glasses. We partnered with the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) to present a combined message on safety when viewing the eclipses.



The ASA will set up an Eclipse Working Group to continue (and extend) the message and maximise publicity and enjoyment of the upcoming eclipses. The next one, in 2028, passes directly over metropolitan Sydney and totality lasts for 4 minutes!

The ASA also partnered with P&O on an Eclipse cruise they were offering – the ASA provided speakers in return for payment (to speakers) and some free cruises which were given to ASA members. There were two ways to access these free cruises: two were given as prizes for people preparing innovative educational material on the eclipse, the other three were awarded randomly via a ballot to ASA members – one was reserved for a student and two were for full ASA members. The awards for eclipse materials went to:

- Kathryn Ross (Curtin)
- Manasvee Saraf (ICRAR, UWA)

The random ballots were won by

- Geraldine Styles (Student member)
- Adam Watts (Full member, UWA)
- Michael Fitzgerald (Full member, Las Cumbres Observatory)

Sincere thanks to Jackie Bondell (EPOC Chair) and Rebecca Allen (Eclipse Ambassador) for their work in ensuring that this initiative was such a success. And thanks again to Terry Cuttle for his help and contacts.

## **22. Correspondence**

The ASA email list remains the primary communication avenue for ASA news. Members can post directly to the list [asa@mailman.sydney.edu.au](mailto:asa@mailman.sydney.edu.au).

This list is also used for Communications from the ASA Council to members regarding items of broad interest.

Michael Brown is the ASA's media and outreach coordinator and oversees the ASA Facebook and twitter accounts and provides general media advice to the society. The ASA twitter account (@AstroSocAus) has 1,802 followers (an increase of 117 on 12 months ago) and regularly tweets ASA and general astronomy news.

The ASA Events Calendar was started in an attempt to list all ASA sponsored events as well as conferences, workshops and meetings that are open to broad Australian and international participation (see <https://asa.astronomy.org.au/events/calendar/>). However, it seems to have fallen into disuse. Do members think it should be continued? If so, how should we add events? Do we need a webform to send the info to the ASA for inclusion?

The Society has been active in advocating for astronomy through various submissions. Some of these are listed below:

- [Submission to the NSW School Curriculum Review](#), on the removal of space and astronomy subjects
- [Submission to the ARC Review](#), and we note that many of our points were quoted in the [final review document](#), including Wi-Fi as an example of unexpected benefits from astronomical research.
- [Submission to Review of Australia's Research Priorities](#), and we have been involved in follow-up meetings with the Chief Scientist Dr Cathy Foley.

These documents are available on the ASA [Public Document Archive](#).



## **23. Science & Technology Australia**

The ASA is a member of Science & Technology Australia (STA), which is Australia's peak body across Science and Technology. ASA members attended major STA events in the past year, including the annual *Science Meets Parliament* and have participated in STA programs such as the post-budget briefing. STA is working toward avenues for greater indigenous participation. They also published their annual survey on STEM remuneration, offering a crucial set of insights of the impact of COVID-19 on Australia's scientific workforce.

The 2023 Science Meets Parliament was run in two parts, with an online component on March 7, 8 and 9, followed by in-person meetings at Parliament House on March 22.

The ASA representatives were

- Sara Webb (Swinburne)
- Karl Glazebrook (Swinburne)
- Rami Mandow (Macquarie)



## **24. National Committee for Astronomy**

The ASA President is an ex-officio member of the NCA, which continues to be active in many areas.

### *Decadal Plan:*

It is time to start work on the next decadal plan. The NCA is coordinating this, on behalf of the Academy. See discussions at the ASM on Friday.

### *ESO:*

Work continues on coordination of the ESO bid, with DISR. See discussions on Friday (and the next item).



### *The next CoE in Astronomy:*

The NCA (and ASA) have jointly initiated a process to help coordinate applications for the next astronomy CoE. A call for White Papers has been made and the deadline for submitting these has been extended to July 13. Please send to either [john.lattanzio@monash.edu](mailto:john.lattanzio@monash.edu) or [vkilborn@swin.edu.au](mailto:vkilborn@swin.edu.au). Note that this is a voluntary process, aimed at helping coordinate applications. Neither the ASA nor the NCA are involved in any rankings or decisions.

## **25. European Southern Observatory**

The major outstanding item from recent Decadal Plans has been Australia's membership of ESO. The 10-year Strategic Partnership between ESO and Australia began in 2017, with an aim to be followed by a bid for Full Membership. Note that this partnership has just passed its halfway mark. DISR formed the ESO Coordinating Group (ESO-CG) to prepare for this bid, with members from various Australian astronomy organisations as well as DISR. The ASA President is an ex-officio member of this group.

Full membership will be expensive, with a joining fee (payable over 10 years) of order \$200M, followed by a decade of annual contributions of around \$30M, for a total over the decade of about \$500M. Note that these are *very* approximate figures.

DISR will prepare the bid for Government, with input from the community. Almost all groups are involved in collating and presenting information to DISR, and AAL are playing a major role. This will also be discussed on Friday.

The Minister will need to argue persuasively in Cabinet for ESO funding, which will be in competition with other proposals that may have more immediate and tangible benefits. This is a challenging case and will need to be backed by strong evidence. We need to be able to make a case based not only on scientific benefits, but also economic growth, and demonstrate the broader return on the substantial investment by the Government. They will want to see justified estimates of how many jobs would be created, in what sectors, and on what timeframes.

One potential avenue involves an in-kind contribution, normally limited to about 25%. Australia could seek a larger than normal in-kind contribution, and the ESO-CG is working to identify something that would be acceptable to ESO in this regard. This would obviously decrease the initial cash required. However, this still requires Australian funds (e.g. LIEF etc) to be raised and spent on the in-kind component. The in-kind component may still be provided by the Australian government but the requirement is that it be spent on-shore.

## **26. Astronomy Australia Limited**

AAL secured funding through the NCRIS "Stage 1" program. As is well known, this was not sufficient to continue AAL support at the levels enjoyed previously. An NCRIS "Stage 2" program was announced and AAL has requested substantial additional support through this program. The outcome hopefully will be known soon.

There was a change on the AAL Board, with Prof Len Sciacca resigning from his Directors position. The replacement Director is Prof Paul Lasky (Monash), as has been already announced to AAL Member institutions.

AAL has been restructuring internally and taking on new staff members to ensure the business is well placed to support building a case for full ESO membership. Kate Barnard has come on board as a new Program Manager (previously from Scienceworks/Museums Victoria), and Tee Aebi-Moyo has joined in a new role – Operations and Events Officer – created to assist the Chief Strategic Partnerships Officer Vimal Parashar.

AAL continues its industry engagement program. A potential recent success is the Aquamate Water Tanks case, where Adelaide-based Aquamate has built prototype water tanks for the Southern Widefield Gamma-ray Observatory (SWGRO) to be built in South America. Two further observatories, including a neutrino observatory, could see demand reach 35,000 water tanks, potentially opening a market for Aquamate of US\$200 – 300 million.

## **27. New Priorities and Planned Activities for 2023/2024**

Council has identified the following priorities for the coming year(s):

- Conduct a survey of the Membership to see how we can best assist members, maximize benefits of the ASM to membership, including students, and to seek ideas on how to effectively use the Society's finances
- Work with the IDEA Chapter to assist all institutions to reach at least Bronze Pleiades level
- Work with the IDEA Chapter to investigate avenues for accepting anonymous reporting of issues
- Initiate the next stage of the ASA History project
- Assist with securing Australia's role and use of international facilities and partnerships
- Manage PASA so that it remains an excellent option for ASA members in a rapidly changing environment
- Update instructions for the ASM and HWSA in view of the inclusion of online delivery modes
- Update the Astronomy Australia website

## **28. Harley Wood School of Astronomy and ASM/AGM 2024**

The 2024 ASM will be organised by CSIRO/ICRAR as an "online first" meeting. This is one way that the Society can have an impact on carbon emission reductions from our community. Indeed, we are suggesting that we alternate primarily online meetings with primarily in-person meetings, as a way to balance the networking (particularly important for our younger members) with our responsibilities to a sustainable future. We continue to seek input on these issues from the SWG and indeed the wider membership.

## **29. By-Law Changes**

Under Article 20 of the Constitution the Council may make or alter By-Laws to the constitution and must notify the membership within six months of doing so. If Members are concerned by any such changes, they can bring this to the attention of Council.

The Council amended By-Laws N4 and Q4 to specify that the Chair of a Society Chapter must be Full Member, Fellow or Honorary Fellow of the Society and that Chairs may have one- or two-year terms of office.

By-Law N7 has been updated to include the new Time Domain Astronomy (TDA) Chapter.

### **30. ASA Council for 2023-2024**

The Council for the next year will be:

Stas Shabala	President
Ashley Ruiters	Vice President
John Lattanzio	Immediate Past President
John O'Byrne	Secretary
Marc Duldig	Secretary
Yeshe Fenner	Treasurer
Christoph Federath	Councillor
Richard McDermid	Councillor
Bernhard Mueller	Councillor
Sarah Pearce	Councillor
Ivy Wong	Councillor
Vacant	Student Representative
Ivo Seitzzahl (in 2023)	Chair, PASA Editorial Board
Tanya Hill (Co-opted)	Prizes and Awards Co-ordinator
Michael Brown (Co-opted)	Media and Outreach Co-ordinator

Sincere thanks to Cath Trott who completes her 6 years on the Exec and is now free to return to a life outside the ASA Council! Many thanks to Barbara Catinella for her two terms on Council, to Richard de Grijs, and to Alma Sebastian as outgoing student representative on Council.

### **31. Closing Remarks**

Once again, our Society remains in a strong position from the perspective of membership, PASA, and finances. As we emerge from the effects of the Covid pandemic, one of our aims is to integrate our community again. The various Chapters and Working Groups are an excellent way to assist in this process, and the new Slack channels should also facilitate greater cohesion.

Two of the main functions of the ASA are the annual ASM/HWSA and PASA. It is important that we continue to provide the ASM and other pre-eminent fora (e.g. Chapter meetings) for the Australian astronomy community to meet and confer, and to provide a highly-competitive journal to publish results from Australian facilities and researchers. An integrated online component is now an essential part of the ASM. Next year CSIRO/ICRAR will be organising an online meeting. If successful, the ASA will consider the possibility of alternating such meetings with face to face meetings in future.

But we are very much aware that the needs of the community change, and this is for example witnessed by the growing number of Special Sessions and Town Hall meetings at the ASM. We need to reconsider how best to serve the members, initially through the upcoming Member Survey but feel free to email any member of the Council with suggestions or comments.

We are starting the next Decadal Plan, and simultaneously preparing the ESO bid. We are negotiating the changes in the publishing environment. There is much to be done, and I am confident that our community will perform these tasks with excellence, as we always do.

It has been a privilege and a pleasure being President of the ASA. We can be sure that the Society is in good hands with the incoming President Stas Shabala taking over.



Professor John Lattanzio

President