



ASTRONOMICAL SOCIETY OF AUSTRALIA

Incorporated in the ACT
ABN 37 660 297 848

President's Report for ASA activities 2012/13 **Monash University, Wednesday 10 July 2013**

1. ASA Council Members 2012 – 2013

Kate Brooks	President
Andrew Hopkins	Vice-President
Lister Staveley-Smith	Immediate Past President
John O'Byrne	Secretary
Marc Duldig	Secretary
Katrina Sealey	Treasurer
Andrew Walsh	Councillor
Cath Trott	Councillor
Amanda Karakas	Councillor
Gavin Rowell	Councillor
Darren Croton	Councillor
Andy Casey	Student Representative
Bryan Gaensler	(Co-opted) Chair, PASA Editorial Board
Tanya Hill	(Co-opted) Prizes and Awards Coordinator

I would like to thank all members of Council for their efforts and contributions, and to acknowledge in particular Lister Staveley-Smith and Andrew Walsh whose terms come to an end at this AGM. I would like to extend a special thank you to Lister who did an excellent job serving as the Society's Vice President, President and Immediate Past President over these past six years.

I am very grateful for the work of those council members who hold ongoing roles in the Society (John O'Byrne, Marc Duldig, Katrina Sealey, Bryan Gaensler and Tanya Hill).

2. Highlights

2.1 Official Opening of MWA and ASKAP

Australia welcomed its newest radio telescopes, the Australian Square Kilometre Array Pathfinder (ASKAP) and the Murchison Widefield Array (MWA). They were officially opened at two separate opening ceremonies held at the Murchison Radio-astronomy

Observatory (MRO) in Western Australia, ASKAP on 5 October 2012 and MWA on 30 November 2012.

2.2 Total Solar Eclipse

On 14 November 2012 the solar system delivered a total solar eclipse across northern Queensland and the Northern Territory. Many of our members participated in community outreach events in Queensland and in the local communities. An ASA Fact Sheet on the Total Eclipse (No. 23) was produced for school groups, amateur astronomy groups and the general public by the Education and Public Outreach Chapter of the ASA. A subsequent Fact Sheet (No. 25) was produced on the annular solar eclipse that took place on the morning of 10 May 2013.

2.3 New leaders of Australia's National Observatories

Welcome to Dr Lewis Ball, the new chief of CSIRO Astronomy and Space Science (and Director of the Australia Telescope National Facility), Professor Warrick Couch, the new Director of the Australian Astronomical Observatory and Professor Matthew Colless, the new Director of the Research School of Astronomy & Astrophysics of the Australian National University (which operates the Siding Spring Observatory).

2.4 Significant achievement and recognition of ASA members

Many of our members and institutes were acknowledged over the past year for their contributions to scientific excellence and the community. Those nationally recognized include:

- Brian Schmidt received Australia's greatest civic honour, Companion in the General Division of the Order of Australia
- Michael Dopita was awarded Member (AM) in the General Division of the Order of Australia.
- Brian Boyle was awarded a Public Service Medal.
- Ken Freeman received the 2012 Prime Minister's Prize for Science and 2013 Henry Norris Russell Lectureship, the American Astronomical Society's top prize.
- Chris Blake received the 2013 Australian Academy of Science's Pawsey Medal.
- Bryan Gaensler was elected as Fellow of the Australia Academy of Science.
- The AAO was co-winner of the 2013 AHRI Gender Equity in the Workplace Awards.

These are in addition to the dozens of other National and State-based prizes that were awarded to our members across the country. This long list of accolades is a testament not only to the high calibre of researchers, teachers and communicators in our society but also to the high profile and regard that Australian astronomy enjoys from the public.

2.5 Launch of new ASA Chapter for Early Career Researchers

The Early Career Researcher Chapter is a new chapter of the ASA that will act to support the needs and development of Early Career Researchers in the Australian astronomy community. Membership of the chapter is open to all members of the ASA (as student member, ordinary member and senior/mentor member). The new Chapter will work with the other ASA Chapters (ANITA, Women in Astronomy and EPOC) to support cross-chapter goals for the benefit of all ASA members.

2.6 Changes to ASA Constitution

An ASA Constitutional Amendment Ballot took place in March/April 2013. The important changes passed included:

- Electronic ballots are now possible (in addition to postal ballots).
- Terms of office for Councilors are now two-year rolling cycles (rather than one year) to allow Councilors the stability to invest effort into council activities on longer timescales.
- The Chair of the Editorial Board is now an *ex-officio* extra Council member (rather than using up one of the two available co-opted positions that the council may appoint).

2.7 Trial of Parallel Sessions

In response to our growing membership and the high number of requests each year for contributed talks at the ASA Annual Science Meeting (ASM) a trial of parallel sessions (2 x 2 parallel sessions) is underway at the 2013 ASM. Feedback from participants will be sought via a post-meeting survey.

2.8 New date for 2014 Annual Science Meeting

There have been increasing requests from members to hold the ASM outside of school holidays. The meeting is usually held in the University common week, which overlaps with most state school holiday periods. After polling the membership on what dates suit the community best, the dates for the 2014 ASM have been set at 20-25 July (outside school holidays but within the teaching break for many universities). The date for the 2015 ASM will likely revert back to the University common week and depending on membership feedback, an alternating pattern of dates may be adopted for future years.

3. Wambelong Bush Fire

On the evening of Sunday 13 January 2013 the Australian astronomy community, along with the rest of the Nation, watched on in horror at the reports unfolding of the fierce Wambelong Bush Fire that roared through the Warrumbungle National Park, to the west of Siding Spring Observatory and the Mopra Telescope. When the fire changed direction with a sudden change in wind and began roaring up the Timor Road, astronomers were glued to the online telescope webcams and announcements made by the Rural Fire Service (RFS). In the following days there was relief to hear that there was no loss of life but absolute shock to uncover the extent of devastation to homes, sheds and outbuildings. Damage to the infrastructure at Siding Spring Observatory and the Mopra Telescope site was evident but it took time to determine that the telescopes themselves had survived.

In the weeks following the bushfire I regularly sent out emails to our membership with status updates of the fire damage and with information on the various funds set up to help the local Coonabarabran community. The concern from our members for their colleagues and friends in “Coona” was overwhelming.

Our members were also very grateful to the brave men and women of the NSW Rural Fire Service, local Police and other volunteers in the Coonabarabran region who did an amazing

job to ensure that no lives were lost and that the damage to properties was kept to a minimum.

Over the past six months since the fires staff from astronomy institutes across Australia, particularly those from the Australian Astronomical Observatory, Australian National University and CSIRO, have worked very hard to return the telescopes to working order. I am very pleased to note that the Siding Spring Observatory and the Mopra Telescope are operational once more. This is fantastic news for the Australian astronomy community, especially for our astronomy students and early career staff working on projects that rely on new data from these world-class facilities.

The ASA Council has given a modest financial donation of \$1000 to three residents affected by the fires. One of these is a current ASA student member and the other two are past ASA members who are well known to our community. The annual membership fee was also waived for the student member.

4. ASA Events in 2012

4.1 ASA Women in Astronomy Workshop 2012

The second ASA women in astronomy workshop was held over 10-11 October 2012 at Swinburne University. The meeting was attended by more than 100 people, including over 30 people streaming online. A brief report on the content and outcomes of the workshop is available from the Chapter's website: <http://asawomeninastronomy.org/>

4.2 ASA ANITA Astroinformatics Summer School 2013

The ASA held its third biennial Astroinformatics Summer School at the University of Queensland, Brisbane over three days (18-20 February 2013). For the first time the school was administered by the ASA Australian National Institute for Theoretical Astrophysics (ANITA) Chapter. The school was attended by 56 participants and 11 instructors.

Tutorials are available online at: <https://github.com/astroinformaticsau>

4.3 ASA ANITA Theory Workshop 2013

The 7th Annual ANITA Theory Workshop took place over two days (21-22 February 2013) after the Astroinformatics Summer School at the same venue. The meeting was attended by 64 participants, with 33 presenting. Nine students gave talks, and the ANITA book prize was awarded to Michael Meehan from James Cook University, for his talk "Enhancement of dark matter relic abundances in various cosmological scenarios".

4.4 ASA Harley Wood Winter School 2013

The 2013 Harley Wood Winter School was held over the 4-7 July 2013 on Phillip Island in Victoria. This year's theme was "Supersize Me: extremely large telescopes, datasets and careers" and was attended by 50 astronomy students and 10 invited speakers.

4.5 ASA Annual Science Meeting 2013

The annual 5-day ASA Science Meeting took place at the Clayton Campus of Monash University in Melbourne over 8-12 July 2013. There were 260 registered participants (the

highest ever) and the program was jam-packed with 100 invited and contributed talks as well as many auxiliary meetings and events and an Australian Synchrotron tour.

4.6 Support of other meetings

The ASA supported the attendance of two members (early career researchers Stas Shabala from UTas and Cath Trott from Curtin) at the 2012 Science Meets Parliament event.

As a cognate society partner of the Australian Institute of Physics, the ASA also supported two astronomy sessions in the 20th Australian Institute of Physics Congress.

5. ASA Membership

Our membership continues to grow. As of 30 June 2013 the current membership is 645 including 200 student members.

Our Corporate Members (AAL, AAO, CSIRO Astronomy and Space Science, Research School of Astronomy and Astrophysics ANU, Centre for Astrophysics and Supercomputing, Swinburne University of Technology and the University of Sydney Physics Foundation) continue to support the Society.

It is also with much pleasure that we announce Council's appointment of Professor Anne Green as an Honorary Fellow of the Society. Anne is a distinguished radio astronomer whose main research focus is the study of the structure and ecology of the Milky Way Galaxy. She was the Director of the Molonglo Observatory for 10 years and was the first female Head of the School of Physics at University of Sydney from 2007-2009. Anne has served on numerous national and international working groups, review boards and executive committees. She is currently a Director and Deputy Chair of the AAL Board, has previously been President of the Astronomical Society of Australia, and was the inaugural chair of a working group of the International Astronomical Union on Women in Astronomy. She is a friend and a mentor to many of our members and the Society is proud to have her as an Honorary Fellow.

6. Financial

Information on the Society's finances is available in the Treasurer's Report.

I wish to acknowledge all of those groups and individuals who have made donations to the Foundation for the Advancement of Astronomy (FAA). The FAA is a tax-deductible Foundation that exists to enhance the ASA's efforts to promote Astronomy and related fields in Australia, and to recognise and support excellence in those fields. The purposes of the FAA are broadly defined to allow the support of prizes, scholarships, research and facilities. The FAA now funds all ASA Prizes. In addition, support from the Richard Cole Fund is now available to support ASA activities for students, in particular the ASA/ANITA Summer School in Theoretical Astrophysics and the Astroinformatics School. The ASA welcomes suggestions for other initiatives.

7. Publications of the ASA (PASA)

The society's journal Publications of the ASA (PASA) continues to thrive under the leadership of Bryan Gaensler and his editorial colleagues: Jeremy Mould, Daniel Price, Michael Burton and Benedetta Ciardi, Beatriz Barbuy and Dawn Erb. The PASA

International Advisory Board is now fully installed to be a public advocate for PASA and to provide strategic advice.

As anticipated, PASA's 2013 ISI two-year impact factor (IF), corresponding to citations in 2012 from papers published in 2010 & 2011, has continued to improve: impact factors for the last three years have been 1.59 in 2011, 2.26 in 2012 and 3.12. PASA now ranks 19 out of the 56 astronomy journals whose IFs are tracked by ISI. Notably, PASA ranks 10th in IF out of the 84 journals published by Cambridge University Press.

PASA's long-standing publishing contract with CSIRO Publishing ended on 31 Dec 2012. A new 5-year publishing contract has been signed with Cambridge University Press (CUP). PASA now publishes continuously, with no division into individual issues. The current median turnaround times are 7 weeks from submission to acceptance, and 7 weeks from acceptance to publication. ASA members can sign up to receive an electronic table of contents alert.

All papers submitted to PASA will now be reviewed with the plagiarism detection software "CrossCheck."

8. Loss of prominent Society members

It is with sadness that I note the passing of two former ASA Foundation members Richard McGee and S. Suzuki.

Suzuki passed away in November 2012 and was a member of the ASA until this time. He was affiliated with CSIRO Radiophysics and worked on the Culgoora Radioheliograph at the Paul Wild Observatory in Narrabri.

Dick McGee passed away in December 2012. He was the secretary and then editor of the Society's journal (then known as Proceedings of the Astronomical Society of Australia) between 1971 and 1988, our longest serving editor so far. In 1990 Dick was made an Honorary Fellow of the Society. During the 36-year period he worked at CSIRO, Dick carried out groundbreaking research on the Galactic Centre and the Magellanic Clouds. Many members of the ASA attended Dick's memorial service, with strong representation from CSIRO and the University of Sydney.

9. ASA Awards and Prizes

2013 Bok Prize for outstanding research in astronomy by an Honours or eligible Masters student at an Australian university.

Awarded to Ben Pope for his thesis "Dancing in the Dark: Kernel Phase Interferometry of Ultracool Dwarfs". Ben completed his honours research at the Sydney Institute for Astronomy (SIfA) at the University of Sydney, supervised by Peter Tuthill and Frantz Martinache.

In addition, Andrew Lehmann receives an honourable mention for his thesis "Shock Waves in Turbulent Molecular Clouds" completed at Macquarie University and supervised by Mark Wardle.

2013 Charlene Heisler Prize for the best PhD thesis accepted by an Australian university.

Awarded to Emily Wisnioski for her thesis "The Kinematic Properties of Clumpy Star-Forming Galaxies", completed at Swinburne University and supervised by Karl Glazebrook.

The field was particularly strong this year, and two Honourable Mentions are also awarded: To Daniel Huber for his thesis "Astroseismology and Interferometry of Cool Stars" completed at SIfA and supervised by Tim Bedding; and to Keith Bannister for his thesis "Astrophysical Radio Transients: Surveys and Techniques" completed at SIfA and supervised by Bryan Gaensler, Tara Murphy and Tim Cornwell.

2013 Louise Webster Prize for outstanding research by a scientist early in their post-doctoral career.

Awarded to Andy Green (Swinburne University) for his paper "High star formation rates as the origin of turbulence in early and modern disk galaxies".

In addition, Alan Duffy (University of Melbourne) receives an honorable mention for his paper on the "Impact of baryon physics on dark matter structures: a detailed simulation study of halo density profiles".

2013 Robert Ellery Lectureship to recognise individuals who have made an outstanding contribution to astronomy throughout their career to-date.

Awarded to Professor Rachel Webster (University of Melbourne) for her significant contributions to both observational and theoretical astrophysical research over the past two decades and her work in supporting students and early career researchers, including mentoring programs and women in physics initiatives.

2013 Harley Wood Lecture – an annual public lecture in honour of the first President of the Society.

"The Birth, Life and Death of our Planet..... and of the Universe" by Assoc. Professor Charley Lineweaver (Australian National University).

2012 Annual Science Meeting Student Prizes (from last year's Annual Scientific Meeting)

Best student Talk:

Winner - Christina Blom (Swinburne) "NGC 4365: A key to Galaxy Formation."

Runner up - Terrence Tricco (Monash) "Improved simulations of magnetic fields in star formation."

Best Student Posters:

Winner: Genevieve Shattow (Swinburne) "Measuring the environments of galaxies in the high redshift Universe."

Runner up#1: Kitty Lo (USyd) "Automatic classification of variable 2XMM sources."

Runner up#2: Hauke Worpel (Monash) "Does the accretion rate change during a thermonuclear burst?"

10. Women in Astronomy Chapter (WiA)

<http://asawomeninastronomy.org/>

The aim of the Women in Astronomy Chapter is to raise the profile of women in Australian astronomy. The current Chair of the Chapter's Steering committee is Lisa Harvey-Smith.

The primary goal of the Chapter is to monitor the status of women working in astronomy in Australia and recommend future actions that will improve the environment for all astronomers. Statistics are now available for the following: ASA membership, ASA Council membership, ASA award recipients and the ASA Annual Science Meetings.

<http://asawomeninastronomy.org/statistics/>

The ASA Women in Astronomy Chapter invites you to register for the Women in Astronomy 2013 Workshop "Pathways to Success." The workshop is free and all are welcome to attend irrespective of gender and seniority. The workshop will be held on 11-12 September 2013 in Perth Western Australia and will be hosted by the International Centre for Radio Astronomy Research (ICRAR).

<http://asawomeninastronomy.org/wia-workshop-2013/>

11. Education and Public Outreach Chapter (EPOC)

<http://asaepoc.wordpress.com/>

The Mission of EPOC is to advance the level of public awareness of the excitement of astronomy and of the international importance of Australian astronomy, while promoting the teaching of astronomy to students and the public. The current Chair of the EPOC Steering Committee is Chris Fluke (Swinburne).

EPOC produces the popular ASA Factsheets series. These information sheets cover a number of topics of interest to the general public, such solar and lunar eclipses, comets and general astronomy information with an Australian flavour. The three most recent fact sheets have proved to be very popular with the public:

No. 25: Annular Solar Eclipse 10 May 2013.

No. 24: Transit of Venus 6 June 2013.

No. 23: Solar eclipse 14 November 2012.

12. Australian National Institute for Theoretical Astrophysics (ANITA)

<http://anita.edu.au/>

ANITA is a virtual national institute, which aims to ensure that the needs of Australian theoretical astrophysics are represented at a national and international level. The goals of ANITA are to raise the profile of Australian theoretical astrophysics, encourage national collaboration, foster international links, facilitate theoretical astrophysics meetings, and provide input into national policy.

The current Chair of the ANITA Steering Committee is Darren Croton. In February 2014 the annual ANITA Workshop and the biennial ANITA Summer School (on N-Body Simulations) will be hosted by the University of Sydney (LOC Chair is Geraint Lewis).

ANITA supports the ongoing education of astronomy students, postdocs and staff by hosting a series of monthly online lectures through Google's Hangouts on Air. These lectures cover a wide range of topics: from basic statistics and computational techniques, to advanced specialised subjects and more.

13. Early Career Research Chapter

<http://asaecr.smp.uq.edu.au/>

This new ASA chapter aims to support the needs and development of early career astronomers (including students) in Australia. The priorities of the Chapter are to:

1. Highlight opportunities for professional training and support.
2. Provide training in professional development.
3. Connect members and provide a support network.
4. Advocate for and represent the ECR community.

An interim Steering Committee is in place, Chaired by David Parkinson.

14. Communications (Information flow to members)

The ASA email exploder remains the primary communication avenue for ASA news. Under the new Mailman system, members can post directly to the email exploder asa@physics.usyd.edu.au.

The ASA Facebook Page continues to be a popular avenue for quickly highlighting recent articles, awards and upcoming events.

The ASA Events Calendar lists all ASA-sponsored events as well as conferences, workshops and meetings in Australia (and occasionally overseas) that are open to broad Australian and international participation (see <http://asa.astronomy.org.au/calendar.html>).

15. Progress against 2012-2013 priorities

In addition to the ongoing work of the ASA, the Council had defined the following series of priorities for 2012-2013. These were suggested by the outgoing Council and presented to the 2012 AGM. (<http://asa.astronomy.org.au/priorities.html>).

1. New ASA Chapter for Early Career Researchers.
Complete – see 2.5 above.
2. Electronic Voting.
Complete – see 2.6 above.
3. Brian Schmidt Lecture Series.
Brian and the ANU have run an impressively full and high-impact schedule of public events over the past two years and a Lecture Series run by ASA and AIP will be put on hold for the time being.
4. Look at restructuring the Council to reflect our increasing membership roles and the changing role of technology.
Complete – see 2.6 above.
5. Management of information flow to members.
Ongoing – see 14 above.
6. Document the early history of the ASA.
Ongoing.
7. Enhance the Australian Astronomy web site.
Ongoing. Thank you to Sarah Maddison for managing this website. The website has moved to a new site: <http://astronomy.org.au/>
8. Run a workshop for ECRs on "How to referee journal articles".

Carried over to 2013-14.

16. New Priorities for ASA Council 2013-2014

The new priorities for the ASA Council 2013-14 (see below) will be discussed during the ASA Annual General Meeting and updated afterwards on the ASA website.

1. Document the early history of the ASA.
2. Enhance the Australian Astronomy web site.
3. Run a workshop for ECRs on "How to referee journal articles".
4. Review priorities of ASA funding to ensure continued support of students.
5. Consider bidding for a future IAU Asia-Pacific Rim (APRIM) meeting.
6. Promote close involvement of the ASA Chapters in the preparation of the next Astronomy Decadal Plan.
7. Fill the newly opened co-opted position on Council (social media focus).
8. Run a workshop on science communication.

17. ASA Council for 2012-2013

Council made nominations for the two opening positions on Council and then solicited the membership for further nominations. One extra nomination was received. One of the council nominees withdrew their nomination and therefore the nomination from the membership was elected unopposed and there was no need for an electronic ballot.

Nominations were sought from the student membership for a new student representative. One nomination was received and the new student representative was elected unopposed.

I am pleased to announce that Council for the following 12 months will be:

Andrew Hopkins	President
Darren Croton	Vice-President
Kate Brooks	Immediate Past President
John O'Byrne	Secretary
Marc Duldig	Secretary
Katrina Sealey	Treasurer
Lee Spitler	Councillor
Cath Trott	Councillor
Amanda Karakas	Councillor
Gavin Rowell	Councillor
Duncan Galloway	Councillor
Paola Oliva Altamirano	Student Representative
Bryan Gaensler	(Ex-officio) Chair, PASA Editorial Board
Tanya Hill	(Co-opted) Prizes and Awards Coordinator
New Position	(Co-opted but currently unfilled)

Congratulations to Andrew Hopkins who will be the new ASA President and I welcome our new Council members Lee Spitler (Macquarie University) and Duncan Galloway (Monash University) and our new student representative Paola Oliva Altamirano.

18. Harley Wood and ASM/AGM 2014

Macquarie University's Astronomy, Astrophysics and Astrophotonics Research Centre (MQAAAstro) will be the host of the 2014 Harley Wood Winter School and the Annual Science Meeting. The Harley Wood Winter School will take place at the Windsor Convention Centre (18 – 20 July 2014) and the Science Meeting will be held on campus (20 – 25 July 2014).

The ASA Council is grateful to Quentin Parker and the team at MQAAAstro for hosting the major ASA event in our yearly calendar.

19. Thank you to organisers of the Harley Wood and ASM/AGM 2013-07-12

A special thanks goes to Duncan Galloway and his Monash colleagues for being excellent hosts and running a jam-packed meeting full of excellent scientific sessions and community meetings as well as trialing a family-friendly breakout session from which to view the talks. Thank you also to Michael Brown and the rest of the Science Organising Committee for scheduling interesting invited and contributed talks and trialing parallel sessions. The Council also appreciate the efforts of the Dane Kleiner and the rest of the Harley Wood Winter School organizing committee for running a very successful school for our student members.

20. Closing remarks

I would like to take this opportunity to thank our members for giving me the opportunity to serve as the ASA President for these past two years. It has been an immensely rewarding and fun experience. I look forward to serving as the Immediate Past President for the next two years and working with our new President, Andrew Hopkins and new Vice President, Darren Croton. I must thank Andrew for his unfailing support over the past two years in the role of Vice President.

I must extend a special thanks to past ASA Presidents Lister Staveley-Smith and Warrick Couch who both encouraged me to step up to this role – they are wonderful mentors and I am extremely grateful to them.

Kate Brooks
July 10, 2013