



ASA Annual Scientific Meeting 2018 – Program

Sun, 24 Jun

Sun, 24 Jun, 1:00 p.m. to 3:00 p.m.

ASA Council meeting
1:00 p.m. - 3:00 p.m.

AR 209 (staff room)

Sun, 24 Jun, 6:00 p.m. to 10:00 p.m.

Welcome reception
6:00 p.m. - 10:00 p.m.

Registration required

6:00 p.m. - 10:00 p.m.

Welcome reception will be held on 24 June at the Hawthorn Arts Centre, just across the road from Swinburne University. Hawthorn Arts Centre is a former civic building with a recently redeveloped community hall, with an intriguing mix of traditional and contemporary design. If you would like to bring guests to this event, please ...

[More info](#) →

Mon, 25 Jun

Mon, 25 Jun, 8:30 a.m. to 9:00 a.m.

Arrival tea/coffee
8:30 a.m. - 9:00 a.m.

Location: ATC 101 foyer

Mon, 25 Jun, 9:00 a.m. to 9:15 a.m.

Opening Ceremony and address
9:00 a.m. - 9:15 a.m.

Location: ATC 101

09:00 - 09:05: Welcome to ASA 2018 - Prof. Karl Glazebrook, Director Centre for Astrophysics and Supercomputing

09:05 - 09:10: Welcome to Country - Wurundjeri Land & Compensation Cultural Heritage Council Aboriginal Corporation

09:10 - 09:15: Opening address - Vice-Chancellor Prof. Linda Kristjanson

Mon, 25 Jun, 9:15 a.m. to 10:30 a.m.

General session: Galactic astronomy
9:15 a.m. - 10:30 a.m.

Location: ATC 101 – Chair: Darren CROTON, Swinburne University of Technology

9:15-9:30 a.m.

Astronomical Evidence for Panspermia

John LATTANZIO, Faculty, Monash University

9:30-9:45 a.m.

The Stingray planetary nebula; radio monitoring of a rapidly evolving star

Lisa HARVEY-SMITH, Faculty, Commonwealth Scientific and Industrial Research Organisation

9:45-10:00 a.m.

Gas Temperature Demography and the Relationship to CO at Low Metallicity in the Magellanic Clouds

Katie JAMESON, Postdoctoral Fellow, Australian National University

10:00-10:15 a.m.

Magnetised clouds in the Galactic corona: Fuel for future star formation?

Asger Emil GRONNOW, PhD student, University of Sydney

10:15-10:30 a.m.

Uniform magnetic fields in HII regions revealed by GMIMS

Alec THOMSON, PhD student, Australian National University

Mon, 25 Jun, 10:30 a.m. to 11:00 a.m.

Morning Tea
10:30 a.m. - 11:00 a.m.

Location: ATC 101 foyer

Mon, 25 Jun, 11:00 a.m. to 11:30 a.m.

Charlene Heisler Prize Talk
11:00 a.m. - 11:30 a.m.

Location: ATC 101 – Chair: Ryan SHANNON, Swinburne University

11:00-11:30 a.m.

3D non-LTE stellar spectroscopy

Anish AMARSI, Postdoctoral Fellow, Max Planck Institute for Astronomy

Mon, 25 Jun, 11:30 a.m. to 12:15 p.m.

General session: High energy astrophysics 1
11:30 a.m. - 12:15 p.m.

Location: ATC 101 – Chair: Ryan SHANNON, Swinburne University

11:30-11:45 a.m.

The UTMOST SMIRF Survey

Vivek VENKATRAMAN KRISHNAN, PhD student, Swinburne University of Technology

11:45 a.m.-12:00 p.m.

Modelling Pulsar Glitches: An Overview

Lisa DRUMMOND, PhD student, University of Melbourne

12:00-12:15 p.m.

Studying accretion with transitional millisecond pulsars

Adam Travis DELLER, Faculty, Swinburne University of Technology

Mon, 25 Jun, 12:15 p.m. to 12:30 p.m.

Chapter Chair Sparklers; Poster Sparklers
12:15 p.m. - 12:30 p.m.

Location: ATC 101 – Chair: Darren CROTON, Swinburne University of Technology

Mon, 25 Jun, 12:30 p.m. to 2:00 p.m.

Lunch
12:30 p.m. - 2:00 p.m.

Location: ATC 101 foyer

ECR Chapter Town Hall Meeting
1:00 p.m. - 2:00 p.m.

Location: ATC 101

Mon, 25 Jun, 2:00 p.m. to 3:30 p.m.

General session: Solar and stellar astrophysics 1
2:00 p.m. - 3:30 p.m.

Location: EN 101 – Chair: Lisa HARVEY-SMITH, Commonwealth Scientific and Industrial Research Organisation

2:00-2:15 p.m.

Making including duplicity (of stars) in astrophysics easier.

JJ ELDRIDGE, Faculty, The University of Auckland

2:15-2:30 p.m.

Toward understanding the origin and evolution of magnetic white dwarfs

Adela KAWKA, Research Fellow, Curtin University

2:30-2:45 p.m.

Low frequency GMRT studies of Ultra-Cool Dwarfs

Andrew ZIC, PhD student, The University of Sydney

2:45-3:00 p.m.

Cool, polluted white dwarfs in the SkyMapper Survey

Stephane VENNES, Research Fellow, unaffiliated

3:00-3:15 p.m.

Discovery of M-dwarf Flares from SkyMapper Southern Survey

Seo-Won CHANG, Postdoctoral Fellow, The Australian National University

Special session: SKA precursor science with ASKAP and MWA 1
2:00 p.m. - 3:30 p.m.

Location: ATC 101 – Chair: Sarah WHITE, Curtin University

2:00-2:15 p.m.

The Murchison Widefield Array Epoch of Reionisation Project

Cathryn TROTT, Faculty, International Centre for Radio Astronomy Research - Curtin University

2:15-2:30 p.m.

Enhancing EoR limits through improved analysis and calibration of MWA observations

Nichole BARRY, Postdoctoral Fellow, University of Melbourne

2:30-2:45 p.m.

Towards a New MWA Limit on the Epoch of X-Ray Heating

Bart PINDOR, Research Fellow, University of Melbourne

2:45-3:00 p.m.

Finding pulsars in the SKA-era: an SKA-demonstrator all-sky pulsar survey with the Phase 2 MWA

Ramesh BHAT, Research Fellow, ICRAR, Curtin University

3:00-3:15 p.m.

Investigating the Interstellar Medium towards PSR J2241-5236 with the MWA

Dilpreet KAUR, PhD student, Curtin University

3:15-3:30 p.m.

Breakdown of a common envelope simulation

Thomas REICHARDT, PhD student, Macquarie University

3:15-3:30 p.m.

Hunting for intermittent pulsars at low frequencies

Bradley MEYERS, PhD student, ICRAR/Curtin University

Mon, 25 Jun, 3:30 p.m. to 4:00 p.m.

Afternoon Tea
3:30 p.m. - 4:00 p.m.

Location: ATC 101 foyer

Mon, 25 Jun, 4:00 p.m. to 5:30 p.m.

General session: Solar and stellar astrophysics 2
4:00 p.m. - 5:30 p.m.

Location: EN 101 – Chair: JJ ELDRIDGE, The University of Auckland

4:00-4:15 p.m.

Star-set on an accretion disk

Geoffrey Raymond BRYAN, PhD student, Swinburne University of Technology, Centre for Astrophysics and Supercomputing

4:15-4:30 p.m.

Unravelling the accretion and jet creation processes at play in post-AGB binaries

Dylan BOLLEN, PhD student, Macquarie University

4:30-4:45 p.m.

Magnetic activity of M-type pre-main sequence stars, and the search for their exoplanets

Belinda Annette NICHOLSON, PhD student, University of Southern Queensland

4:45-5:00 p.m.

Luminous red novae: population models and future prospects

George HOWITT, PhD student, University of Melbourne

5:00-5:15 p.m.

Modelling single star evolution in Globular Clusters

Poojan AGRAWAL, PhD student, Swinburne University of Technology

5:15-5:30 p.m.

Using solar twins to constrain variation in the fine-structure constant on the Galactic scale

Daniel Andrew BERKE, PhD student, Swinburne University of Technology

Special session: SKA precursor science with ASKAP and MWA 2
4:00 p.m. - 5:30 p.m.

Location: ATC 101 – Chair: Shivani BHANDARI, CSIRO/ATNF

4:00-4:15 p.m.

WALLABY early science - Imaging of a nearby spiral galaxy

Dane KLEINER, Postdoctoral Fellow, CSIRO

4:15-4:30 p.m.

Gemini Follow-up of Two Massive HI Clouds Discovered with the Australian Square Kilometer Array Pathfinder

Juan MADRID, Postdoctoral Fellow, CSIRO

4:30-4:45 p.m.

WALLABY Early Science observations of the NGC 7232/3 triplet

Karen LEE-WADELL, Postdoctoral Fellow, Commonwealth Scientific and Industrial Research Organisation

4:45-5:00 p.m.

ASKAP/WALLABY Early Science Observations of the NGC 7162 Galaxy Group

Tristan REYNOLDS, PhD student, International Centre for Radio Astronomy Research/University of Western Australia

5:00-5:15 p.m.

ASKAP Wide and Deep HI surveys

Jonghwan RHEE, Research Fellow, ICRAR, UWA

5:15-5:30 p.m.

Deep Low Frequency Observations of the GAMA 23 Field

Nick SEYMOUR, Faculty, ICRAR/Curtin

Mon, 25 Jun, 6:00 p.m. to 7:30 p.m.

Evening Event: ECR Chapter Speed Meet-A-Mentor
6:00 p.m. - 7:30 p.m.

Location: AMDC Level 3 Sky Lounge

Mon, 25 Jun, 7:30 p.m. to 9:30 p.m.

Evening Event: IDEA Chapter Rainbow Dinner
7:30 p.m. - 9:30 p.m.

Glenferrie hotel

The Rainbow Dinner is sponsored by People & Culture at Swinburne University.

Tue, 26 Jun

Tue, 26 Jun, 8:30 a.m. to 9:00 a.m.

Arrival tea/coffee
8:30 a.m. - 9:00 a.m.

Location: ATC 101 foyer

Tue, 26 Jun, 9:00 a.m. to 10:15 a.m.

Special session: ADACS special session on a focus on big data and computing 1
9:00 a.m. - 10:15 a.m.

Location: ATC 101 – Chair: Paul HANCOCK, Curtin University

9:00-9:45 a.m.

ADACS Keynote Talk: Collaborations in the Extreme: The rise of open code development in the scientific community

Kelle CRUZ, Faculty, City University of New York Hunter College

9:45-10:00 a.m.

Data Central for Survey Teams

Elizabeth MANNERING, Professional staff, Australian Astronomical Observatory

10:00-10:15 a.m.

More Usable Flops per Watt: A Story About a Highly-optimized Correlation Function Code

Manodeep SINHA, Postdoctoral Fellow, Swinburne University of Technology

Tue, 26 Jun, 10:15 a.m. to 10:30 a.m.

Poster Sparklers
10:15 a.m. - 10:30 a.m.

Location: ATC 101 – Chair: Darren CROTON, Swinburne University of Technology

Tue, 26 Jun, 10:30 a.m. to 11:00 a.m.

Morning Tea
10:30 a.m. - 11:00 a.m.

Location: ATC 101 foyer

Tue, 26 Jun, 11:00 a.m. to 11:45 a.m.

Special session: ADACS special session on a focus on big data and computing 2
11:00 a.m. - 11:45 a.m.

Location: ATC 101 – Chair: Paul HANCOCK, Curtin University

11:00-11:15 a.m.

Using Extreme Digitisation to Combat Data Challenges in CMB Observations

Lennart BALKENHOL, Masters student, University of Melbourne

11:15-11:30 a.m.

PerSieve: understanding the role for the astronomer in the data-intensive era

Sarah HEGARTY, PhD student, Swinburne University of Technology

11:30-11:45 a.m.

High-performance pipeline processing for ASKAP

Matthew WHITING, Professional staff, CSIRO

Tue, 26 Jun, 11:45 a.m. to 12:15 p.m.

Louise Webster Prize Talk
11:45 a.m. - 12:15 p.m.

Location: ATC 101 – Chair: Paul HANCOCK, Curtin University

11:45 a.m.-12:15 p.m.

The cosmic evolution of ionised gas kinematics

Emily WISNIOSKI, Postdoctoral Fellow, Australian National University

Tue, 26 Jun, 12:15 p.m. to 12:30 p.m.

Poster Sparklers
12:15 p.m. - 12:30 p.m.

Location: ATC 101 – Chair: Darren CROTON, Swinburne University of Technology

Tue, 26 Jun, 12:30 p.m. to 2:00 p.m.

Lunch
12:30 p.m. - 2:00 p.m.

Location: ATC 101 foyer

IDEA Chapter Town Hall Meeting
1:00 p.m. - 2:00 p.m.

Location: ATC 101

Tue, 26 Jun, 2:00 p.m. to 3:30 p.m.

Special session: Massively multiplexed spectroscopic surveys 1
2:00 p.m. - 3:30 p.m.

Location: ATC 101 – Chair: Emily WISNIOSKI, Australian National University

2:00-2:15 p.m.

Special session: SKA precursor science with ASKAP and MWA 3
2:00 p.m. - 3:30 p.m.

Location: EN 101 – Chair: Keith BANNISTER, Australia Telescope National Facility

2:00-2:15 p.m.

<p><i>TAIPAN and the Starbug Fibre-Positioning Technology</i></p> <p>Kyler KUEHN, Professional staff, Australian Astronomical Observatory</p>	<p><i>Square Kilometre Array update</i></p> <p>David LUCHETTI, Other, Mr</p>
<p>2:15-2:30 p.m.</p> <p><i>Update on the Giant Magellan Telescope project</i></p> <p>Sarah BROUGH, Faculty, UNSW</p>	<p>2:15-2:30 p.m.</p> <p><i>ASKAP commissioning and survey science update</i></p> <p>Aidan HOTAN, Research Fellow, CSIRO</p>
<p>2:30-2:45 p.m.</p> <p><i>Future Prospects for the Maunakea Spectroscopic Explorer</i></p> <p>Aaron ROBOTHAM, Faculty, International Centre for Radio Astronomy Research / UWA</p>	<p>2:30-2:45 p.m.</p> <p><i>Low-frequency polarimetry on the path to the SKA: the POGS project</i></p> <p>Christopher RISELEY, Postdoctoral Fellow, CSIRO Astronomy & Space Science</p>
<p>2:45-3:00 p.m.</p> <p><i>The Taipan Peculiar Velocity Survey</i></p> <p>Khaled SAID, Postdoctoral Fellow, Research School of Astronomy & Astrophysics, Australian National University.</p>	<p>2:45-3:00 p.m.</p> <p><i>The MWA GLEAM 4-Jy Sample</i></p> <p>Sarah WHITE, Postdoctoral Fellow, Curtin University</p>
<p>3:00-3:15 p.m.</p> <p><i>The Drivers of Stellar Populations in Early-type Galaxies</i></p> <p>Tania BARONE, PhD student, Australian National University</p>	<p>3:00-3:15 p.m.</p> <p><i>Evolutionary Map of the Universe Early Science Results</i></p> <p>Andrew O'BRIEN, PhD student, CSIRO</p>
<p>3:15-3:30 p.m.</p> <p><i>Impact of group environment on galaxy star formation in GAMA</i></p> <p>Stefania BARSANTI, PhD student, Macquarie University</p>	<p>3:15-3:30 p.m.</p> <p><i>Low-Frequency Carbon Recombination Lines in the Orion Molecular Cloud Complex</i></p> <p>Chenoa TREMBLAY, PhD student, ICRAR-Curtin University</p>

Tue, 26 Jun, 3:30 p.m. to 4:00 p.m.

Afternoon Tea
3:30 p.m. - 4:00 p.m.

Location: ATC 101 foyer

Tue, 26 Jun, 4:00 p.m. to 5:30 p.m.

Special session: Massively multiplexed spectroscopic surveys 2
4:00 p.m. - 5:30 p.m.

Location: ATC 101 – Chair: **Stefania BARSANTI**, Macquarie University

<p>4:00-4:15 p.m.</p> <p><i>Opportunities for Australia with the Large Synoptic Survey Telescope</i></p> <p>Sarah BROUGH, Faculty, UNSW</p>
<p>4:15-4:30 p.m.</p> <p><i>The transformation of satellites galaxies in groups as seen by SAMI</i></p> <p>Luca CORTESE, Faculty, International Centre for Radio Astronomy Research - University of Western Australia</p>
<p>4:30-4:45 p.m.</p> <p><i>A unified understanding of scaling relations through kinematic decomposition of bulges and disks.</i></p> <p>Sree OH, Postdoctoral Fellow, The Australian National University</p>
<p>4:45-5:00 p.m.</p>

Special session: SKA precursor science with ASKAP and MWA 4
4:00 p.m. - 5:30 p.m.

Location: EN 101 – Chair: **Bradley MEYERS**, ICRAR/Curtin University

<p>4:00-4:15 p.m.</p> <p><i>The Spectrum of Fast Radio Burst Emission</i></p> <p>Jean-Pierre MACQUART, Faculty, Curtin University</p>
<p>4:15-4:30 p.m.</p> <p><i>The ASKAP fast radio burst project: status and plans</i></p> <p>Keith BANNISTER, Faculty, Australia Telescope National Facility</p>
<p>4:30-4:45 p.m.</p> <p><i>The fast radio burst population observed by ASKAP</i></p> <p>Ryan SHANNON, Research Fellow, Swinburne University</p>
<p>4:45-5:00 p.m.</p> <p><i>CRAFT-GP: The Longest Galactic Plane Survey for Radio Transients</i></p>

The SAMI Galaxy Survey: Second Public Data Release

Nic SCOTT, Research Fellow, The University of Sydney

5:00-5:15 p.m.

Spatially-resolved galaxy angular momentum

Sarah SWEET, Postdoctoral Fellow, Swinburne University of Technology

5:15-5:30 p.m.

Chasing the bright end of the $z \sim 9-10$ galaxy luminosity function with the BoRG

Stephanie BERNARD, PhD student, University of Melbourne

Hao QIU, PhD student, University of Sydney

5:00-5:15 p.m.

Early science results from the ASKAP-FLASH survey

Elizabeth MAHONY, Research Fellow, CSIRO Astronomy and Space Science

5:15-5:30 p.m.

The Australian SKA pathfinder: Exploring the transient radio Universe.

Shivani BHANDARI, Postdoctoral Fellow, CSIRO/ATNF

Tue, 26 Jun, 6:00 p.m. to 10:00 p.m.

ADACS Astropy And Astro Coding Chat

6:00 p.m. - 7:30 p.m.

ATC 205

ADACS is sponsoring this informal meet-up and networking session for astro coders to help us better understand who is involved in this space and how we can support you.

Kelle Cruz, our invited keynote speaker for the data and computing session at the ASA annual meeting, is particularly interested to meet people who extensively use astropy. If you would like to know more about how to get involved with the open source and open development astropy project do come along to chat.

ADACS will be sponsoring pizza and drinks for this event. Please [RSVP here](#), or [contact us](#) for more information.

Social Outing to MBO

6:00 p.m. - 10:00 p.m.

6:00 p.m. - 10:00 p.m.

A social outing is being organised to the [Mount Burnett Observatory \(MBO\)](#) on Tuesday, 26 June. MBO is a community astronomical facility in the Dandenong Ranges, east of Melbourne. The association is running both optical and radio facilities, is involved with astrophotography and augmented reality experimentation, so there will be lots ...

[More info](#) →

Wed, 27 Jun

Wed, 27 Jun, 8:00 a.m. to 9:00 a.m.

Heads of Departments Meeting

8:00 a.m. - 8:50 a.m.

Location: AR 209 (staff room)

Arrival tea/coffee

8:30 a.m. - 9:00 a.m.

Location: ATC 101 foyer

Wed, 27 Jun, 9:00 a.m. to 10:30 a.m.

Special session: ESO

9:00 a.m. - 10:30 a.m.

Location: ATC 101 – Chair: Karl GLAZE BROOK, Swinburne

9:00-9:30 a.m.

ESO in 2018

Rob IVISON, Faculty, ESO

9:30-9:45 a.m.

ESO: strategic partnership and full membership

Matthew COLLESS, Faculty, ANU

9:45-10:00 a.m.

Paranal and La Silla Update and Opportunities

Michael IRELAND, Faculty, Australian National University

10:00-10:15 a.m.

Update from your ESO Users Committee Representative

Caroline FOSTER, Research Fellow, The University of Sydney

10:15-10:30 a.m.

MAVIS: An Australian-led MCAO-Assisted Visible Imager and Spectrograph for the Very Large Telescope

Richard MCDERMID, Faculty, Macquarie University

Wed, 27 Jun, 10:30 a.m. to 11:00 a.m.

Morning Tea

10:30 a.m. - 11:00 a.m.

Location: ATC 101 foyer

Wed, 27 Jun, 11:00 a.m. to 12:30 p.m.

ASA Annual General Meeting

11:00 a.m. - 12:30 p.m.

Location: ATC 101

Wed, 27 Jun, 12:30 p.m. to 2:00 p.m.

Lunch

12:30 p.m. - 2:00 p.m.

Location: ATC 101 foyer

ANITA Chapter Town Hall Meeting

1:00 p.m. - 2:00 p.m.

Location: ATC 101

Australia and eROSITA Meeting:

strengthening the partnership
1:00 p.m. - 2:00 p.m.

Location: EN 101

Wed, 27 Jun, 2:00 p.m. to 3:30 p.m.

General session: Extragalactic astronomy 1
2:00 p.m. - 3:30 p.m.

Location: ATC 101 – Chair: **Simon MUTCH**,
The University of Melbourne

2:00-2:15 p.m.

*The mass dependance of Dark Matter Halo shapes
and implications for cusps, cores and ultra diffuse
galaxies*

Chris BROOK, Research Fellow, Universidad de La
Laguna/Instituto de Astrofisica de Canarias

2:15-2:30 p.m.

*Resolving z ~2 galaxy using adaptive coadded source
plane reconstruction*

Soniya SHARMA, PhD student, Australian National
University

2:30-2:45 p.m.

Thin disk and spiral arm formation at high redshift

General session: Planetary astrophysics
2:00 p.m. - 3:30 p.m.

Location: EN 101 – Chair: **Michael IRELAND**,
Australian National University

2:00-2:15 p.m.

Disks down under: dust traps in transition disks

Sarah MADDISON, Faculty, Swinburne University of
Technology

2:15-2:30 p.m.

Early evolution of protostellar discs

Eloise BIRCHALL, PhD student, Australian National
University

2:30-2:45 p.m.

*Binary star formation, evolution of their discs and
implications on planet formation.*

Rajika KURUWITA, PhD student, Australian National

National Committee for Astronomy (NCA)
2:30 p.m. - 3:30 p.m.

Location: ATC 714

Please note that NCA is scheduled from **2:30
p.m to 5:30 p.m.**

<p>Tiantian YUAN, Research Fellow, Swinburne</p> <p>2:45-3:00 p.m.</p> <p><i>Early Metal Pollution in the AURORA Simulations</i></p> <p>Adam BATTEN, PhD student, Swinburne University of Technology</p>	<p>University</p> <p>2:45-3:00 p.m.</p> <p><i>Planet or stellar variability?</i></p> <p>Jinglin ZHAO, PhD student, The University of New South Wales</p>
<p>3:00-3:15 p.m.</p> <p><i>The stellar kinematics and star-formation histories of high-redshift galaxies with KMOS@VLT</i></p> <p>Jon Trevor MENDEL, Postdoctoral Fellow, Australian National University</p>	<p>3:00-3:15 p.m.</p> <p><i>Searching for young exoplanets with high-contrast imaging in the near-infrared</i></p> <p>Alexander WALLACE, PhD student, Australian National University</p>
<p>3:15-3:30 p.m.</p> <p><i>Numerical effects in cosmological simulations involving baryons and self-interacting dark matter</i></p> <p>Aaron LUDLOW, Research Fellow, ICRAR UWA</p>	<p>3:15-3:30 p.m.</p> <p><i>Enhanced Constraints on the Interior Composition and Structure of Rocky Exoplanets</i></p> <p>Haiyang WANG, PhD student, Research School of Astronomy and Astrophysics, The Australian National University</p>

Wed, 27 Jun, 3:30 p.m. to 4:00 p.m.

<p><u>Afternoon Tea</u> 3:30 p.m. - 4:00 p.m.</p>	<p><u>National Committee for Astronomy (NCA)</u> 3:30 p.m. - 4:00 p.m.</p>
<p>ATC 101 foyer</p>	<p>Location: ATC 714</p> <p>Please note that NCA is scheduled from 2:30 p.m to 5:30 p.m.</p>

Wed, 27 Jun, 4:00 p.m. to 5:30 p.m.

<p><u>General session: Extragalactic astronomy 2</u> 4:00 p.m. - 5:30 p.m.</p>	<p><u>General session: High energy astrophysics 2 + Education/outreach</u> 4:00 p.m. - 5:30 p.m.</p>	<p><u>National Committee for Astronomy (NCA)</u> 4:00 p.m. - 5:30 p.m.</p>
<p>Location: ATC 101 – Chair: Barbara CATINELLA, ICRAR/UWA</p> <p>4:00-4:15 p.m.</p> <p><i>The Connection Between Structure and Cold Gas Reservoirs in Galaxies.</i></p> <p>Robin COOK, PhD student, International Centre for Radio Astronomy Research</p> <p>4:15-4:30 p.m.</p> <p><i>The Indirect Influence of Quasars on Reionization</i></p> <p>Jacob SEILER, PhD student, Swinburne University Technology</p> <p>4:30-4:45 p.m.</p> <p><i>Selection and characterization of Lyman Continuum Galaxies</i></p> <p>Uroš MEŠTRIĆ, PhD student, CAS</p> <p>4:45-5:00 p.m.</p> <p><i>HI Galaxies with Little Star Formation</i></p> <p>Vaishali PARKASH, PhD student, Monash University</p> <p>5:00-5:15 p.m.</p>	<p>EN 101 – Chair: Rebecca ALLEN, Swinburne</p> <p>4:10-4:15 p.m.</p> <p><i>Neutrino astronomy with IceCube at the South Pole</i></p> <p>Gary HILL, Faculty, University of Adelaide</p> <p>4:15-4:30 p.m.</p> <p><i>K2 Background Survey</i></p> <p>Ryan RIDDEN-HARPER, PhD student, Australian National University</p> <p>4:30-4:45 p.m.</p> <p><i>New frontiers in optical fast-transient discovery</i></p> <p>Igor ANDREONI, PhD student, Swinburne University of Technology</p> <p>4:45-5:00 p.m.</p> <p><i>My five months in industry</i></p> <p>Caitlin ADAMS, PhD student, Ms.</p> <p>5:00-5:15 p.m.</p> <p><i>The Parkes Radio Telescope as a tool for STEM engagement</i></p>	<p>Location: ATC 714</p> <p>Please note that NCA is scheduled from 2:30 p.m to 5:30 p.m.</p>

Cool and Close Encounters of the HI Kind

Michelle CLUVER, Faculty, Swinburne University of Technology, Centre for Astrophysics and Supercomputing

5:15-5:30 p.m.

The Economics of First Galaxies Growth

Alan R DUFFY, Faculty, Swinburne University of Technology

Jimi GREEN, Faculty, CSIRO Astronomy and Space Science

5:15-5:30 p.m.

Studying broadband radio spectra in the classroom

Darren HAMLEY, Masters student, Willetton Senior High School/Edith Cowan University

Wed, 27 Jun, 5:45 p.m. to 6:45 p.m.

[Evening Event: ATNF Town Hall Meeting](#)
5:45 p.m. - 6:45 p.m.

Location: ATC 103

Wed, 27 Jun, 7:00 p.m. to 9:00 p.m.

[Harley Wood Public Lecture](#)
7:00 p.m. - 9:00 p.m.

7:00 p.m. - 9:00 p.m.

Oxygen: Breathing in Stars

Professor Lisa Kewley

Life as we know it requires oxygen, carbon, and nitrogen. Yet the universe began with none of these elements. The elements responsible for life were produced in the deep recesses of stars over 13 billion years of cosmic time. How these elements assembled to ...

[More info](#) →

Thu, 28 Jun

Thu, 28 Jun, 8:30 a.m. to 9:00 a.m.

[Arrival tea/coffee](#)
8:30 a.m. - 9:00 a.m.

Location: ATC 101 foyer

Thu, 28 Jun, 9:00 a.m. to 10:00 a.m.

[Special session: The future of Australian optical astronomy](#)
9:00 a.m. - 10:00 a.m.

Location: ATC 101 – Chair: Clare MCLAUGHLIN, Department of Industry, Innovation and Science

9:00-9:20 a.m.

The Future of Astronomical Support at the Anglo-Australian Telescope

Chris LIDMAN, Professional staff, Australian National University

9:20-9:40 a.m.

A new era for optical astronomical instrumentation in Australia

Michael STEEL, Faculty, Macquarie University

9:40-10:00 a.m.

Discussion and Q&A - led by Chris Lidman and Michael Steele

Chris LIDMAN, Professional staff, Australian National University

Thu, 28 Jun, 10:00 a.m. to 10:15 a.m.

Poster Sparklers

10:00 a.m. - 10:15 a.m.

Location: ATC 101 – Chair: Darren CROTON, Swinburne University of Technology

Thu, 28 Jun, 10:15 a.m. to 10:30 a.m.

Conference photo

10:15 a.m. - 10:30 a.m.

Thu, 28 Jun, 10:30 a.m. to 11:00 a.m.

Morning Tea

10:30 a.m. - 11:00 a.m.

Location: ATC 101 foyer

Thu, 28 Jun, 11:00 a.m. to 11:30 a.m.

Anne Green Prize Talk

11:00 a.m. - 11:30 a.m.

Location: ATC 101 – Chair: Minh HUYNH, CSIRO / ICRAR

11:00-11:30 a.m.

Cold gas and star formation in galaxies

Barbara CATINELLA, Faculty, ICRAR/UWA

Thu, 28 Jun, 11:30 a.m. to 12:15 p.m.

General session: Instrumentation and methods

11:30 a.m. - 12:15 p.m.

Location: ATC 101 – Chair: Minh HUYNH, CSIRO / ICRAR

11:30-11:45 a.m.

Dark Matter direct detection in Australia

Elisabetta BARBERIO, Professional staff, The University of Melbourne

11:45 a.m.-12:00 p.m.

The SkyHopper CubeSat: Big Science with a Tiny Telescope

Michele TRENTI, Faculty, University of Melbourne

12:00-12:15 p.m.

The UWL on Parkes -- Early results and future science

Jane KACZMAREK, Postdoctoral Fellow, CSRIO Astronomy & Space Science

Thu, 28 Jun, 12:15 p.m. to 12:30 p.m.

Poster Sparklers
12:15 p.m. - 12:30 p.m.

Location: ATC 101 – Chair: **Darren CROTON**, Swinburne University of Technology

Thu, 28 Jun, 12:30 p.m. to 2:00 p.m.

Lunch
12:30 p.m. - 2:00 p.m.

Location: ATC 101 foyer

EPOC Chapter Town Hall Meeting
1:00 p.m. - 2:00 p.m.

Location: ATC 101

Thu, 28 Jun, 2:00 p.m. to 3:30 p.m.

Special session: GALAH, Gaia and the Galaxy 1
2:00 p.m. - 3:30 p.m.

Location: EN 101 – Chair: **Simon CAMPBELL**, Monash University

2:00-2:15 p.m.

The GALAH Survey: Data Release 2 and Latest Science Results

Daniel ZUCKER, Faculty, Macquarie University / Australian Astronomical Observatory

2:15-2:30 p.m.

Galactic Archaeology with GALAH and K2.

Sanjib SHARMA, Postdoctoral Fellow, The University of Sydney

2:30-2:45 p.m.

Galactic Archaeology with HERMES: open clusters and stellar streams

Gayandhi DE SILVA, Research Fellow, AAO/USyd

2:45-3:00 p.m.

The GALAH Survey: Velocity fluctuations in the Milky Way using red clump giants

Shourya KHANNA, PhD student, SIFA, University of Sydney

3:00-3:15 p.m.

Chronostar: Software for the identification of star formation events through the application of machine learning to Gaia DR2

Timothy CRUNDALL, Masters student, ANU

3:15-3:30 p.m.

A Survey of Chromospheric Activity in GALAH Stars

Mark BEAVIS, PhD student, University of Southern Queensland

Special session: Multi-messenger astronomy 1
2:00 p.m. - 3:30 p.m.

Location: ATC 101 – Chair: **Jade POWELL**, Swinburne University of Technology

2:00-2:15 p.m.

GOTO in the Advanced Gravitational-Wave Detector Era

Kendall ACKLEY, Postdoctoral Fellow, Monash University

2:15-2:30 p.m.

Multimessenger follow-up of continuous gravitational wave candidates

Gregory ASTON, Postdoctoral Fellow, Monash Centre for Astrophysics

2:30-2:45 p.m.

A turnover in the radio lightcurve of GW170817

Dougal DOBIE, PhD student, University of Sydney

2:45-3:00 p.m.

Searches for pulsations in LMXBs

Shanika GALAUDAGE, Undergraduate/honours student, Monash University

3:00-3:15 p.m.

Unveiling the violent Universe with gravitational wave astronomy

Eric HOWELL, Postdoctoral Fellow, University Western Australia

3:15-3:30 p.m.

LIGO search for gravitational wave counterparts to FRBs

David COWARD, Faculty, University of Western Australia

Thu, 28 Jun, 3:30 p.m. to 4:00 p.m.

Afternoon Tea
3:30 p.m. - 4:00 p.m.

Location: ATC 101 foyer

Thu, 28 Jun, 4:00 p.m. to 5:30 p.m.

General session: Cosmology
4:00 p.m. - 5:30 p.m.

Location: ATC 101 – Chair: **Janie HOORMANN**, University of Queensland

4:00-4:15 p.m.

Cosmology with the Dark Energy Survey

Tamara DAVIS, Faculty, University of Queensland

4:15-4:30 p.m.

eROSITA: Cosmology and astrophysics with the next generation X-ray all-sky survey

Kirpal NANDRA, Faculty, Max Planck Institute for Extraterrestrial Physics

4:30-4:45 p.m.

Cross-correlation of Cosmic Microwave Background lensing from POLARBEAR experiment with the H-ATLAS of dusty interstellar medium galaxies

Anh PHAM, PhD student, The University of Melbourne

4:45-5:00 p.m.

Polarisation Properties of Extragalactic Radio Sources Observed with SPTpol 500 deg² survey

Nikhel GUPTA, Postdoctoral Fellow, School of Physics, University of Melbourne

5:00-5:15 p.m.

First ever cluster lensing detection in CMB polarisation data

Sanjaykumar PATIL, PhD student, University of Melbourne

5:15-5:30 p.m.

Updating Microlensing Constraints on Primordial Black Holes

Josh CALCINO, PhD student, University of Queensland

Special session: GALAH, Gaia and the Galaxy 2
4:00 p.m. - 5:30 p.m.

Location: EN 101 – Chair: **Gayandhi DE SILVA**, AAO/USyD

4:00-4:15 p.m.

Substructures and tidal distortions in the Magellanic stellar periphery

Dougal MACKEY, Research Fellow, Australian National University

4:15-4:30 p.m.

Confirmation for a binary origin for blue straggler stars in Magellanic Cloud clusters

Chengyuan LI, Postdoctoral Fellow, Dept of Physics & Astronomy, Macquarie University

4:30-4:45 p.m.

Pushing the envelope on globular clusters

Jeffrey SIMPSON, Postdoctoral Fellow, Australian Astronomical Observatory

4:45-5:00 p.m.

Post-Asymptotic Giant Branch (post-AGB) Stars as Tracers of the Origin of Elements in the Universe

Devika KAMATH, Faculty, Macquarie University

5:00-5:15 p.m.

On the Peculiar Lives of Low-Mass Primordial Stars

Simon CAMPBELL, Research Fellow, Monash University

5:15-5:30 p.m.

Dredge-up Main-Sequence O stars: implications for the Epoch of Reionization and chemical evolution of the Universe

Arpita ROY, Postdoctoral Fellow, ANU

Thu, 28 Jun, 7:00 p.m. to 11:00 p.m.

ASA Conference Dinner
7:00 p.m. - 11:00 p.m.

Registration required

7:00 p.m. - 11:00 p.m.

The ASA conference dinner will be held on Thursday, the 28th of June, at the Coral Atoll room of [SEA LIFE Melbourne Aquarium](#).



The cost of the dinner is included in the registration fee. The event includes canapes, drinks, and a three-course dinner. The venue caters for special dietary ...

[More info](#) →

Fri, 29 Jun

Fri, 29 Jun, 8:30 a.m. to 9:00 a.m.

[Arrival tea/coffee](#)
8:30 a.m. - 9:00 a.m.

Location: ATC 101 foyer

Fri, 29 Jun, 9:00 a.m. to 10:30 a.m.

[General session: Extragalactic astronomy 3](#)
9:00 a.m. - 10:30 a.m.

Location: EN 101 – Chair: Tamara DAVIS, University of Queensland

9:00-9:15 a.m.

Asymmetric radio galaxies as probes of jet-environment interaction

Stas SHABALA, Faculty, University of Tasmania

9:15-9:30 a.m.

Probing the connection between radio galaxy morphology and environment with GLASS

Jonathan ROGERS, PhD student, University of Tasmania

[Special session: Multi-messenger astronomy 2](#)
9:00 a.m. - 10:30 a.m.

Location: ATC 101 – Chair: Kendall ACKLEY, Monash University

9:00-9:15 a.m.

Optimising 3G gravitational wave detectors for neutron star science

Francisco HERNANDEZ, PhD student, Monash University

9:15-9:30 a.m.

Using machine learning algorithms to enable gravitational-wave detection of short duration binary neutron star remnants

Paul EASTER, PhD student, Monash University

<p>9:30-9:45 a.m.</p> <p><i>Catching Sub-kpc Scale AGN Feedback in the Act in the Compact Steep Spectrum source 4C 31.04</i></p> <p>Henry ZOVARO, PhD student, The Australian National University</p>	<p>9:30-9:45 a.m.</p> <p><i>Investigating black hole spin with gravitational waves</i></p> <p>Grant David MEADORS, Research Fellow, Monash University</p>
<p>9:45-10:00 a.m.</p> <p><i>AGN Reverberation Mapping with OzDES</i></p> <p>Janie HOORMANN, Postdoctoral Fellow, University of Queensland</p>	<p>9:45-10:00 a.m.</p> <p><i>Dances with Death: The Dynamics of Compact Binary Pairs as Gravitational Wave Sources</i></p> <p>Sera Jade RAUHUT, Undergraduate/honours student, Swinburne University of Technology</p>
<p>10:00-10:15 a.m.</p> <p><i>Exploring High-z Black Hole - Bulge Relations With Semi-Analytics</i></p> <p>Madeline MARSHALL, PhD student, University of Melbourne</p>	<p>10:00-10:15 a.m.</p> <p><i>An X-ray guided search for gravitational waves</i></p> <p>Nikhil SARIN, PhD student, Monash University</p>
<p>10:15-10:30 a.m.</p> <p><i>The next-generation automated radio source classifier based upon Radio Galaxy Zoo and advanced machine learning algorithms</i></p> <p>O. Ivy WONG, Research Fellow, ICRAR/UWA</p>	<p>10:15-10:30 a.m.</p> <p><i>Insights into double neutron star and double black hole formation with COMPAS</i></p> <p>Simon STEVENSON, Postdoctoral Fellow, Swinburne University of Technology</p>

Fri, 29 Jun, 10:30 a.m. to 11:00 a.m.

Morning Tea
10:30 a.m. - 11:00 a.m.

Location: ATC 101 foyer

Fri, 29 Jun, 11:00 a.m. to 12:30 p.m.

<p><u>General session: Extragalactic astronomy 4</u> <u>11:00 a.m. - 12:30 p.m.</u></p> <p>Location: EN 101 – Chair: Nikki NIELSEN, Swinburne University of Technology</p>	<p><u>Special session: Multi-messenger astronomy 3</u> <u>11:00 a.m. - 12:30 p.m.</u></p> <p>Location: ATC 101 – Chair: Eric HOWELL, University Western Australia</p>
<p>11:00-11:15 a.m.</p> <p><i>Titans of the Early Universe: The origin of the most massive, high-redshift quasars</i></p> <p>Tyrone E. WOODS, Research Fellow, Monash University</p>	<p>11:00-11:15 a.m.</p> <p><i>Next Generation Gravitational Wave Observatories - The Network</i></p> <p>Bram SLAGMOLEN, Research Fellow, The Australian National University</p>
<p>11:15-11:30 a.m.</p> <p><i>Infer Structure of Quasar with Machine Learning</i></p> <p>Suk Yee YONG, PhD student, The University of Melbourne</p>	<p>11:15-11:30 a.m.</p> <p><i>Research topics at the University of Western Australia towards third generation gravitational wave detectors</i></p> <p>Joris VAN HEIJNINGEN, Postdoctoral Fellow, University of Western Australia</p>
<p>11:30-11:45 a.m.</p> <p><i>Calibrating the James Webb Space Telescope filters as star formation rate indicators</i></p> <p>Madhooshi Ruwanpura SENARATH, PhD student, Monash centre for Astrophysics, School of physics and Astronomy, Monash University</p>	<p>11:30-11:45 a.m.</p> <p><i>Parkes Pulsar Timing Array</i></p> <p>Stefan OSLOWSKI, Research Fellow, Swinburne University of Technology</p>
<p>11:45 a.m.-12:00 p.m.</p> <p><i>Star-forming properties of galaxies in the core and filamentary regions of the merging galaxy cluster A2744</i></p> <p>Tiffany E. DAY, PhD student, Macquarie University</p>	<p>11:45 a.m.-12:00 p.m.</p> <p><i>Improving gravitational wave science with machine learning</i></p> <p>Jade POWELL, Postdoctoral Fellow, Swinburne University of Technology</p>
<p>12:00-12:15 p.m.</p> <p><i>The globular cluster system of NGC 4526</i></p> <p>Leonie CHEVALIER, Masters student, Swinburne University of Technology</p>	<p>12:00-12:15 p.m.</p> <p><i>Hidden Markov model tracking of continuous gravitational waves from binary neutron stars</i></p> <p>Patrick CLEARWATER, PhD student, The University of Melbourne</p>
	<p>12:15-12:30 p.m.</p>

12:15-12:30 p.m.

The Chemical and Dynamical Composition of NGC 3115

Adriano POGLI, PhD student, Macquarie University

Inferring the population properties of binary black holes.

Colm TALBOT, PhD student, Monash University

Fri, 29 Jun, 12:30 p.m. to 1:15 p.m.

Lunch
12:30 p.m. - 1:15 p.m.

Location: ATC 101 foyer

Fri, 29 Jun, 1:15 p.m. to 1:45 p.m.

Invited Talk
1:15 p.m. - 1:45 p.m.

Location: ATC 101 – Chair: **Darren CROTON**, Swinburne University of Technology

1:15-1:45 p.m.

Listening to the Universe: Ground Based Gravitational Wave Astronomy and Australia's Future Role

David BLAIR, Faculty, University of Western Australia

Fri, 29 Jun, 1:45 p.m. to 2:30 p.m.

Special session: Exoplanets & galactic structure in the TESS era
1:45 p.m. - 2:30 p.m.

Location: ATC 101 – Chair: **Darren CROTON**, Swinburne University of Technology

1:45-2:00 p.m.

The FunnelWeb Survey: Spectroscopic Stellar Parameters for All Southern Stars in the Gaia Era

Adam RAINS, PhD student, Australian National University

2:00-2:15 p.m.

The photometric selection of M-dwarfs using Gaia, WISE and 2MASS photometry

John BENTLEY, PhD student, University of New South Wales

2:15-2:30 p.m.

Flying the nest to the Magellanic Clouds and Bridge with GALAH and TESS-HERMES

Jeffrey SIMPSON, Postdoctoral Fellow, Australian Astronomical Observatory

Fri, 29 Jun, 2:30 p.m. to 2:45 p.m.

Student Prize Announcement; Closing Ceremony
2:30 p.m. - 2:45 p.m.

Location: ATC 101 – Chair: **Karl GLAZEBROOK**, Swinburne

Sponsors

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We acknowledge support from the Hunstead gift for Astrophysics at the Sydney Institute for Astronomy.

We thank the School of Science at Swinburne University for their support.

The Rainbow Dinner is sponsored by People & Culture at Swinburne University.