

# PROGRAM

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[S] denotes student presentation

[#] denotes abstract number

## SUNDAY, 7TH JULY 2013

### Registration Opens

4:00pm - 8:00pm

Banquet Halls

### Welcome Reception

6:00pm - 8:00pm

Banquet Halls

## MONDAY, 8TH JULY 2013

### Opening and Ellery Introduction

8:45am - 9:10am

Central One Theatre

Chair: Michael Brown

8:45 AM

**Duncan Galloway, Conference Chair**

Conference Introduction

8:50 AM

**Dr Alan Finkel, Chancellor of Monash University**

Opening of Conference

9:05 AM

**Kate Brooks, President of Astronomical Society of Australia**

Ellery Lecture Introduction

### Ellery Lecture

9:10am - 10:30am

Central One Theatre

Chair: Michael Brown

9:10 AM

**Rachel Webster, University of Melbourne**

What can a gravitationally-lensed quasar teach us? [1]

10:00 AM

**Julia Bryant, University of Sydney**

SAMI and the SAMI galaxy Survey [2]

### Morning Tea

10:30am - 11:00am

Banquet Halls

### Galaxies

11:00am - 12:15pm

Central One Theatre

Chair: Michael Brown

11:00 AM

**Julie Banfield, CSIRO Astronomy and Space Science**

The Australia Telescope Large Area Survey: Data Release and Early Science [3]

11:15 AM

**Laura Hoppmann (S), ICRAR/UWA**

Deep 21-cm HI Observations with the Arecibo Telescope [4]

11:30 AM

**Luca Cortese, Swinburne University of Technology**

The role of the cluster environment on the star formation cycle of galaxies [5]

11:45 AM

**Paola Oliva-Altamirano (S), Swinburne University of Technology**

Galaxy and Mass Assembly (GAMA): Testing galaxy formation models through the most massive objects in the universe [6]

12:00 PM

**Iraklis Konstantopoulos, Australian Astronomical Observatory**

The Evolution of Galaxies in Compact Groups [7]

### Poster Sparkler Talks (1)

12:15pm - 12:20pm

Central One Theatre

Chair: Michael Brown

See listing at end of program.

### ASA Chapter Sparklers

12:20pm - 12:30pm

Central One Theatre

Chair: Michael Brown

- The Astronomical Society of Australia's Education and Public Outreach Chapter
- Women In Astronomy Chapter
- Early Career Researcher Chapter
- Australian National Institute for Theoretical Astrophysics Chapter

### Lunch

12:30pm - 2:00pm

Banquet Halls

### Speed Meet a Mentor

12:45pm - 1:45pm

West Wing Cellar

Chair: Tanya Hill

Some lunch will be provided in the West Wing Cellar for those attending the lunchtime session.

### Solar System and Extra-Solar Planets

2:00pm - 3:15pm

Central One Theatre

Chair: Daniel Bayliss

2:00 PM **Michele Bannister, NRC - Herzberg**

Small worlds, big puzzles: insights from the Solar System's outer frontiers [8]

2:30 PM **Duncan Wright, UNSW**

First results from the AAT search for Habitable-Zone Exoplanets orbiting Late M-dwarfs [9]

2:45 PM **Jonathan Horner, UNSW School of Physics**

Dynamical Constraints on Multi-Planet Exoplanet Systems [10]

3:00 PM **Francesco Pignatale (S), Swinburne University of Technology**

Unveiling the 2D Chemistry of Protoplanetary Discs [11]

### Poster Sparkler Talks (2)

3:15pm - 3:30pm

Central One Theatre

Chair: Daniel Bayliss

See listing at end of program.

### Afternoon Tea

3:30pm - 4:00pm

Banquet Halls

### Galaxies, HI and Radio Continuum

4:00pm - 5:30pm

Central One Theatre

Chair: Samantha Penny

4:00 PM **Barbara Catinella, Swinburne University of Technology**

HI properties of massive galaxies [12]

4:30 PM **Louise Webster Prize**

**Andy Green, Australian Astronomical Observatory**

The connection between star formation and turbulence [13]

5:00 PM **Sarah Reeves (S), University of Sydney**

A search for intervening HI absorption in nearby, gas-rich galaxies [14]

5:15 PM **Benjamin McKinley, Australian National University**

The giant lobes of Centaurus A observed with the Murchison Widefield Array [15]

### Poster Session One

5:30pm - 6:30pm

Banquet Halls

Refreshments will be provided. See poster listing for names of poster presenters.

### Early Career Researcher Social Mixer

5:45pm - 6:45pm

Banquet Halls

Chair: David Parkinson

**Heads of Department Meeting**

8:00am – 9:00am

Room 115, Building 28 (Maths Building)

**eResearch, Science Communication and Outreach**

9:00am - 9:30am

Central One Theatre

Chair: Simon O'Toole

9:00 AM **Christopher Fluke**, *Swinburne University of Technology*

Further adventures in three-dimensional visualisation: Leaping into your data [16]

9:15 AM **Darren Croton**, *Swinburne University of Technology*

Building model universes in the "cloud": the Theoretical Astrophysical Observatory (TAO) [17]

**The Importance of Science Communication (Panel Discussion)**

9:30am - 10:30am

Central One Theatre

Chair: Simon O'Toole

- **Brian Schmidt**, *Australian National University*
- **Graham Phillips**, *ABC*
- **Katie Mack**, *University of Melbourne*
- **Paul Dalgarno**, *The Conversation*

**Morning Tea and Press Event**

10:30am - 11:00am

Banquet Halls

The press event will be held in the West Wing Cellar.

**Dwarf Galaxies and Star Clusters**

11:00am - 12:15pm

Central One Theatre

Chair: Christopher Usher

11:00 AM **Samantha Penny**, *Monash University, MoCA*

The origin and evolution of dwarf galaxies [18]

11:30 AM **Sarah Sweet**, *University of Queensland*

Tidal dwarf galaxy candidates in gas-rich groups [19]

11:45 AM **Christina Blom**, *Swinburne University*

Globular Cluster Studies Uncover remarkable details of Ongoing Accretion in the Haloes of two nearby Early-type Galaxies [20]

12:00 PM **Gary Da Costa**, *Australian National University*

The [Fe/H] Abundance Dispersion in the Remote Halo Globular Cluster NGC 5824 [21]

**Poster Sparkler Talks (3)**

12:15pm - 12:30pm

Central One Theatre

Chair: Christopher Usher

See listing at end of program.

**Lunch**

12:30pm - 2:00pm

Banquet Halls

**Australian National Institute for Theoretical Astrophysics**

12:45pm - 1:45pm

Central One Theatre

Chair: Darren Croton

Some lunch will be provided in the Central One Theatre Foyer for those attending the lunchtime session.

**A New Era in Australian Radio Astronomy: MWA**

2:00pm - 3:30pm

Central One Theatre

Chair: Douglas Bock

2:00 PM **Steven Tingay**, *Curtin University*

The Murchison Widefield Array, low frequency Precursor to the Square Kilometre Array [22]

2:20 PM **Randall Wayth**, *Curtin University*

The MWA All-sky Survey [23]

- 2:35 PM **Rachel Webster, University of Melbourne**  
MWA: Epoch of Reionisation [24]
- 2:50 PM **Martin Bell, Sydney University**  
Transients and variables with the Murchison Widefield Array [25]
- 3:00 PM **Cathryn Trott, Curtin University**  
Information Theory and the MWA [26]
- 3:10 PM **Natasha Hurley-Walker, Curtin Institute of Radio Astronomy**  
MWA Observations of the Galactic Plane and Magellanic Clouds [27]
- 3:20 PM **Emil Lenc, University of Sydney**  
First polarisation results with the MWA [28]

#### Afternoon Tea

3:30pm - 4:00pm

Banquet Halls

#### A New Era in Australian Radio Astronomy: ASKAP and SKA

4:00pm - 5:30pm

Central One Theatre

Chair: Steven Tingay

- 4:00 PM **Antony Schinckel, CSIRO**  
The Australian SKA Pathfinder – an update [29]
- 4:15 PM **Lisa Harvey-Smith, CSIRO**  
Update on the Australian SKA Pathfinder (ASKAP) [30]
- 4:30 PM **Brian Boyle, DIICCSRTE**  
The Australian SKA Project office [31]
- 4:45 PM **Philip Diamond, SKA Organisation**  
Designing the SKA [32]
- 5:00 PM **Stuart Wyithe, University of Melbourne**  
Science with SKA1 - Low frequency [33]
- 5:15 PM **Lister Staveley-Smith, University of Western Australia**  
Science with SKA1-survey [34]

#### Australia Telescope National Facility Community Meeting

5:45pm - 7:30pm

Banquet Halls

Chair: Douglas Bock

Finger food and some drinks will be provided with a short presentation.

#### Harley Wood Lecture

7:30pm - 8:30pm

Central One Theatre

Chair: Hamed Moradi and Duncan Galloway

- 7:30 PM **Charley Lineweaver, Australian National University**  
The Birth, Life and Death of our Planet.....and of the Universe [35]

**Supernovae, High Energy and Fundamental Astrophysics**

9:00am - 10:30am

Central One Theatre

Chair: Duncan Galloway

- 9:00 AM **Alexander Heger, Monash University**  
Supernovae from the First Stars [36]
- 9:30 AM **Eric Howell, University Western Australia**  
Are Ultra-long and Sub-luminous gamma-ray bursts distinct populations? [37]
- 9:45 AM **Fang Yuan, Australian National University**  
Locations of Peculiar Supernovae as a Diagnostic of Their Origins [38]
- 10:00 AM **Roland Crocker, ANU**  
The implications of the giant, magnetized outflows from the Galactic Centre [39]
- 10:15 AM **Luciano Rezzolla, Max-Planck Institute for Gravitational Physics**  
The missing link: from merging neutron stars to magnetic jets [40]

**Morning Tea**

10:30am - 11:00am

Banquet Halls

**Astronomical Society of Australia Annual General Meeting**

11:00am - 12:30pm

Central One Theatre

**Lunch**

12:30pm - 2:00pm

Banquet Halls

**The Astronomical Society of Australia's Education and Public Outreach Chapter**

12:45pm - 1:45pm

Central One Theatre

Chair: Christopher Fluke

Some lunch will be provided in the Central One Theatre Foyer for those attending the lunchtime session.

**PARALLEL SESSION - Cosmology**

2:00pm - 3:30pm

Central One Theatre

Chair: Darren Croton

- 2:00 PM **Christina Magoulas (S), University of Melbourne**  
Measuring the bulk flow from the 6dFGS peculiar velocity survey [41]
- 2:15 PM **Jeff Cooke, Swinburne University**  
Supernova discoveries at  $z > 2$  and their host galaxies [42]
- 2:30 PM **Jun Koda, Swinburne University of Technology**  
Peculiar velocity power spectrum [43]
- 2:45 PM **Jaehong Park (S), The University of Melbourne**  
The cross-power spectrum between 21cm emission and galaxies in hierarchical galaxy formation models [44]
- 3:00 PM **Gregory Poole, University of Melbourne**  
DRAGONS: The Dark Ages Reionization and Galaxy Formation Simulation Program [45]
- 3:15 PM **Michael Childress, Australian National University**  
SN 2012fr: A Luminous Normal Type Ia Supernova in NGC 1365 [46]

**PARALLEL SESSION - Protostars, Star Formation and the ISM**

2:00pm - 3:30pm

Campus Centre Cinema

Chair: Andrew Walsh

- 2:00 PM **Christophe Pinte, UMI-FCA Santiago**  
Dust grain size sorting in the TW Hydrae protoplanetary disk [47]
- 2:15 PM **Catarina Ubach (S), Swinburne University**  
A multi-wavelength study of the GQ Lup protoplanetary disc [49]
- 2:30 PM **Tracey Hill, Joint ALMA Observatory**  
The role of ridges in high-mass star formation - high resolution insights from Herschel [48]
- 2:45 PM **James Green, CSIRO Astronomy and Space Science**  
MAGMO: Mapping the Galactic Magnetic field through OH masers [50]

- 3:00 PM **Aaron Rizzuto (S), Macquarie University**  
The Membership and Multiplicity of Sco-Cen [51]
- 3:15 PM **Michael Ashley, University of New South Wales**  
Terahertz observations of star forming regions from Antarctica [52]

#### Afternoon Tea

3:30pm - 4:00pm

Banquet Halls

#### PARALLEL SESSION - Galaxies, HI and Radio Continuum

4:00pm - 5:00pm

Central One Theatre

Chair: Naomi McClure-Griffiths

- 4:00 PM **Joanne Dawson, University of Tasmania**  
Making a SPLASH with the Dish [53]
- 4:15 PM **Vanessa Moss (S), University of Sydney/CSIRO Astronomy and Space Science**  
High velocity clouds in the Galactic All Sky Survey: Catalogue [54]
- 4:30 PM **Helga Denes (S), Swinburne University of Technology**  
Finding galaxies with unusual HI content [55]
- 4:45 PM **James Allison, University of Sydney**  
The cold gas in nearby radio galaxies with HIPASS [56]

#### PARALLEL SESSION - Solar and Stellar Astrophysics

4:00pm - 5:00pm

Campus Centre Cinema

Chair: Stephen Marsden

- 4:00 PM **Jan Staff, Macquarie University**  
Jets and planetary nebulae [57]
- 4:15 PM **Taissa Danilovich (S), Chalmers University of Technology**  
Mass-loss and the circumstellar environment of S type AGB stars [58]
- 4:30 PM **Paul Cally, Monash University**  
MHD Mode Conversion in Stellar Atmospheres [59]
- 4:45 PM **Donna Burton (S), University of Southern Queensland**  
Doppler Imaging of AB Doradus [60]

#### New Opportunities with the Gemini Observatory

5:00pm - 5:30pm

Central One Theatre

Chair: Stuart Wyithe

- 5:00 PM **Markus Kissler-Patig, Gemini Observatory**  
New Opportunities with the Gemini Observatory [61]

Refreshments will be provided after this session in the Central One Theatre lobby.

#### Poster Session Two

5:30pm - 6:30pm

Banquet Halls

Refreshments will be provided.

#### National Committee for Astronomy Meeting

6:00pm - 8:00pm

Conference Room, Conference Centre

Chair: Stuart Wyithe

**Stellar and Archaeoastronomy**

9:00am - 10:30am

Central One Theatre

Chair: Alexander Heger

- 9:00 AM **Amanda Karakas**, *Australian National University*  
Stellar yields from low and intermediate-mass stars [62]
- 9:30 AM **Andrew Casey (S)**, *RSAA, ANU*  
Adopting the Aquarius Stream: Is the Aquarius Stream the result of a disrupted classical Globular Cluster? [63]
- 9:45 AM **Ioannis Gonidakis**, *CSIRO*  
The circumstellar environment of the Mira Variable TX Cam, as revealed by long-term high-resolution interferometric observations of SiO masers [64]
- 10:00 AM **Michael Ireland**, *Australian Astronomical Observatory*  
The FunnelWeb Survey with the UKST [65]
- 10:15 AM **Duane Hamacher**, *University of New South Wales*  
Cultural Astronomy in the Torres Strait [66]

**Morning Tea**

10:30am - 11:00am

Banquet Halls

**Galaxies, Active Galactic Nuclei**

11:00am - 12:15pm

Central One Theatre

Chair: Christopher Fluke

- 11:00 AM **Stas Shabala**, *University of Tasmania*  
Triggering and feedback from Active Galactic Nuclei [67]
- 11:30 AM **Kevin Pimblet**, *Monash University*  
The duty cycle of galaxy cluster AGN [68]
- 11:45 AM **Rebecca Davies (S)**, *RSAA, ANU*  
NGC7130: An Insight into Ionising sources of Composite Galaxies [69]
- 12:00 PM **Bok Prize Lecture**  
**Benjamin Pope (S)**, *Sydney Institute for Astronomy*  
Dancing in the Dark: Kernel Phase Interferometry of Ultracool Dwarfs [70]

**The Next Decadal Plan for Australian Astronomy**

12:15pm - 12:30pm

Central One Theatre

Chair: Christopher Fluke

- 12:15 PM **Stuart Wyithe**, *University of Melbourne*  
The 2016-25 Decadal Plan for Australian Astronomy [71]

**Lunch**

12:30pm - 2:00pm

Banquet Halls

**Women in Astronomy**

12:45pm - 1:45pm

Central One Theatre

Chair: Lisa Harvey-Smith

Some lunch will be provided in the Central One Theatre Foyer for those attending the lunchtime session.

**PARALLEL SESSION - Galaxies**

2:00pm - 3:30pm

Central One Theatre

Chair: Darren Croton

- 2:00 PM **Christopher Usher (S)**, *Swinburne University of Technology*  
Do All Galaxies' Globular Clusters Have the Same Stellar Populations? [72]
- 2:15 PM **Sarah Martell**, *Australian Astronomical Observatory*  
Multiple stellar populations in intermediate-age star clusters [73]
- 2:30 PM **Nicholas Scott**, *Swinburne University of Technology*  
How environment affects early-type galaxies - insights from integral-field spectroscopy surveys [74]

- 2:45 PM **Michelle Cluver**, *Australian Astronomical Observatory*  
Galaxies that Flash as they Crash [75]
- 3:00 PM **Jacob Crossett (S)**, *Monash University*  
UV Strong Red Sequence Cluster Galaxies: Their Environment and Morphology [76]
- 3:15 PM **Nicolas Bonne (S)**, *MoCA, Monash University*  
What Shapes the Local Universe K-Band Galaxy Luminosity Function? [77]

**PARALLEL SESSION - Protoplanets, Extrasolar Planets and Planetary Nebulae**

2:00pm - 3:30pm

Campus Centre Cinema

Chair: Duncan Wright

- 2:00 PM **Daniel Bayliss**, *ANU*  
Transiting Exoplanets from HATSouth [78]
- 2:15 PM **Karen Lewis**, *Tokyo Institute of Technology*  
Moon Radius Limits for Planets with Spotted Host Stars: Scatter in the Folded Light-curve [79]
- 2:30 PM **Brett Addison (S)**, *University of New South Wales*  
Recently Discovered Exoplanetary System in Spin-Orbit Misalignment from Rossiter-McLaughlin Measurements [80]
- 2:45 PM **Kimberly Bott (S)**, *University of New South Wales*  
Modelling the Atmospheric Structure and Composition of Hot Jupiter HD 189733b [81]
- 3:00 PM **Sarah Maddison**, *Swinburne University*  
The intriguing transitional disk HD142527 - planet formation in action? [82]
- 3:15 PM **Quentin Parker**, *Macquarie University/AAO*  
Planetary nebulae: Windows into the soul of stellar Death [83]

**Afternoon Tea**

3:30pm - 4:00pm

Banquet Halls

**PARALLEL SESSION - Galaxies, including High Redshift Galaxies**

4:00pm - 5:30pm

Central One Theatre

Chair: Emma Ryan-Weber

- 4:00 PM **Tim Dolley (S)**, *MoCA*  
The Environment of  $z < 1$  Star Forming Galaxies [84]
- 4:15 PM **Glenn Kacprzak**, *Swinburne University of Technology*  
Tracing Outflows and Accretion: A Bimodal Azimuthal Dependence of the Circumgalactic Medium [85]
- 4:30 PM **Lee Spitler**, *Australian Astronomical Observatory / Macquarie University*  
A first glimpse into the complete galaxy population 12 billion years ago [86]
- 4:45 PM **Michele Trenti**, *University of Cambridge*  
The first galaxies: bright and faint [87]
- 5:00 PM **Edoardo Tescari**, *University of Melbourne*  
Properties of simulated galaxies at  $z \sim 4-7$  [88]
- 5:15 PM **Antonios Katsianis (S)**, *University of Melbourne*  
Properties of high redshift galaxies in cosmological hydrodynamical simulations [89]

**PARALLEL SESSION - High Energy Astrophysics**

4:00pm - 5:30pm

Campus Centre Cinema

Chair: Duncan Galloway

- 4:00 PM **Thomas Russell (S)**, *ICRAR*  
Disk-jet coupling in Galactic black hole X-ray binaries [90]
- 4:15 PM **Sean Farrell**, *The University of Sydney*  
Unveiling the Variable X-ray Sky [91]
- 4:30 PM **Roberto Soria**, *Curtin University*  
Black hole mass in an ultraluminous X-ray source [92]
- 4:45 PM **Sammanani Premachandra**, *Monash University*  
Precision ephemerides for gravitational-wave searches: Sco X-1 & Cyg X-2 [93]



- 5:00 PM **Hauke Worpel (S), MoCA**  
Evidence for accretion rate change during type I X-ray bursts [94]
- 5:15 PM **Phoebe de Wilt (S), University of Adelaide**  
Unveiling Unidentified TeV Gamma-Ray Sources at 12mm with Mopra [95]

### Conference Dinner

7:00pm - 10:30pm Dragon Boat Palace, 149 Lonsdale Street, Melbourne  
Buses will depart from the Robert Blackwood Hall, Monash Clayton Campus at 6:15pm. Buses will start returning back to Monash from Melbourne at 9:30pm.

## FRIDAY, 12TH JULY 2013

### Galaxies

- 9:00am - 10:15am Central One Theatre  
Chair: Heath Jones
- 9:00 AM **Chris Power, University of Western Australia**  
Do we have robust astrophysical tests of dark matter? [96]
- 9:30 AM **Simon Mutch, The University of Melbourne**  
A formation history model of galaxy growth [97]
- 9:45 AM **Michael Brown, Monash University**  
Star Formation in Red Spiral Galaxies [98]
- 10:00 AM **Charlene Heisler Prize**  
**Emily Wisnioski, MPE**  
From 13 to 600+: the Future of High-z IFU Surveys [99]

### Morning Tea

10:15am - 11:00am Banquet Halls

### Facilities

- 11:00am - 12:30pm Central One Theatre  
Chair: Heath Jones
- 11:00 AM **Matthew Bailes, Swinburne University of Technology**  
Discovery of a population of millisecond duration radio bursts [100]
- 11:15 AM **Rogier Windhorst, Arizona State University**  
How the James Webb Space Telescope can measure First Light, Reionization, and Galaxy Assembly: Science and Project Update as of 2013 [101]
- 11:30 AM **Kyler Kuehn, AAO**  
Optical Spectroscopy from TAIPAN to the GMT's MANIFEST [102]
- 11:45 AM **Andrew Hopkins, Australian Astronomical Observatory**  
The ASKAP/EMU Data Challenge [103]
- 12:00 PM **Doug Simons, CFHT**  
CFHT Status Report and Future Plans [104]
- 12:15 PM Closing Remarks

### Lunch

12:30pm - 2:00pm Banquet Halls

### Australian Synchrotron Tour

12:45pm - 1:45pm Australian Synchrotron, Blackburn Road, Clayton  
Meet at the registration desk to walk to the Australian Synchrotron and sign in as a group.

## POSTER SPARKLER TALK LISTING

### Poster Sparkler Talks (1)

12:15pm - 12:20pm

Central One Theatre

Chair: Michael Brown

- 1<sup>st</sup> **Eromanga Adermann**  
Searching for Intermediate Mass Black Holes in Early Type Galaxies Featuring Prominent Dust Lanes  
[201]
- 2<sup>nd</sup> **Richard Beare**  
New Measurements of the Evolving Growth Rates of Galaxies [205]
- 3<sup>rd</sup> **Georgios Bekiaris**  
Investigating Kinematic Modelling of Disk Galaxies Using GPUs [206]
- 4<sup>th</sup> **Sarah Bruzese**  
Is the initial mass function universal? The case of NGC 2915 [210]
- 5<sup>th</sup> **Pierluigi Cerulo**  
Morphological Transformation of Red Sequence Galaxies in High Redshift Galaxy Clusters [211]

### Poster Sparkler Talks (2)

3:15pm - 3:30pm

Central One Theatre

Chair: Daniel Bayliss

- 1<sup>st</sup> **Kate Chow**  
The Australia Telescope Large Area Survey: The composite properties of young AGN [212]
- 2<sup>nd</sup> **Jordan Collier**  
Wide-Field Infrared Survey Explorer Observations of Infrared Faint Radio Sources [213]
- 3<sup>rd</sup> **Dimitri Douchin**  
Estimating the fraction of binary central stars of planetary nebulae using the IR-excess method  
[217]
- 4<sup>th</sup> **Tobias Feger**  
A stable wavelength comb for precise radial velocity measurements [219]
- 5<sup>th</sup> **Bi-Qing For**  
The twisted Magellanic Stream and its Leading Arm(s) [221]
- 6<sup>th</sup> **Gregory Goldstein**  
A Catalogue of Radio AGN behind the LMC [223]
- 7<sup>th</sup> **Elise Hampton**  
The search for TeV particle accelerators in the star forming HII complex G5.89-0.39 using Chandra  
[225]
- 8<sup>th</sup> **Sreeja S Kartha**  
Wide-field imaging studies of globular cluster systems in three intermediate mass early-type galaxies  
[236]
- 9<sup>th</sup> **Champlain Kenyi**  
Spectroscopic Fitting of the Terrestrial Atmosphere for Improved Planetary Atmosphere  
Observations and Greenhouse Gas Monitoring [237]
- 10<sup>th</sup> **Rebecca Lange**  
GAMA: The local mass-size relationship revisited [239]
- 11<sup>th</sup> **Sarah Leslie**  
The Energy Source and Dynamics of Infrared Luminous Galaxy ESO148-IG02 [241]
- 12<sup>th</sup> **Belinda Nicholson**  
Is The Fundamental Plane Fundamental? [252]
- 13<sup>th</sup> **Andrew Prentice**  
Mercury, Titan and Ganymede: new theoretical models for bulk chemical composition, internal  
physical structure and origin which match the latest spacecraft data [260]

### Poster Sparkler Talks (3)

12:15pm - 12:30pm

Central One Theatre

Chair: Christopher Usher

- 1<sup>st</sup> **Alex Hill**  
Magnetic fields in the Smith Cloud [227]
- 2<sup>nd</sup> **Vicki Lowe**  
Variations between star formation environments [244]
- 3<sup>rd</sup> **Scott Meyer**  
HI stacking can be used to measure edge-on rotation velocities for use in the Tully-Fisher relation [249]
- 4<sup>th</sup> **Themiya Nanayakkara**  
Colour bimodality of galaxies at high redshift [251]
- 5<sup>th</sup> **Nicola Pastorello**  
Globular Cluster and Stellar Metallicity Radial Profiles in Early-Type Galaxies [256]
- 6<sup>th</sup> **Kevin Pimblet**  
The role of stellar mass and environment for cluster blue fraction, AGN, and star formation [258]
- 7<sup>th</sup> **Stuart Ryder**  
The First Supernova Discovered with GeMS/GSAOI [263]
- 8<sup>th</sup> **Giulia Savorgnan**  
The supermassive black hole mass - Sérsic index (and other) relation(s) for bulges and elliptical galaxies [265]
- 9<sup>th</sup> **Richard Hunstead**  
How accurate is SuperCOSMOS astrometry? [229]
- 10<sup>th</sup> **Dane Kleiner**  
A test for galaxy pre-processing using large-scale structure in the local Universe [238]
- 11<sup>th</sup> **Andrew Jacob**  
The Fall and Rise of Sydney Observatory [232] and Making visible the women who measured stars in Australia [233]
- 12<sup>th</sup> **Tui Britton**  
Astronomical masers in massive star formation: A survey of the 25 GHz methanol maser series [208]
- 13<sup>th</sup> **Robert Nilsson**  
Properties of coronal rains in the Sun [253]