

# OzSKA: radio astronomy in the next decade

8<sup>th</sup> – 10<sup>th</sup> April 2015

Hercus Theatre, School of Physics David Caro Building,  
University of Melbourne

## Day 1 – Wednesday 8 April 2015

Time	ITEM	Time
10:00am	Welcome	
10:00am – 10:30am	Morning Tea	
	The Basics – Australian Style Session Chair – Rachel Webster	
10:30am – 10:50am	David Luchetti (Invited talk) <i>Rebaselining and the Australian SKA site</i>	15 mins + 5 mins Q&A
10:50am – 11:40am	Robert Braun (Invited talk) <i>Science with the SKA</i>	45 mins + 5 mins Q&A
11:40am – 12:00pm	Steven Tingay <i>The MWA, precursor to key science for the SKA</i>	15 mins + 5 mins Q&A
12:00pm – 12:20pm	Ray Norris (invited) <i>ASKAP in the SKA Era</i>	15 mins + 5 mins Q&A
12:20pm – 12:30pm	Sarah Pearce <i>Organisation of the Australian Office</i>	10 mins Q&A
12:30pm – 2:00pm	Lunch	
	EoR Session Chair – Sarah Pearce	
2:00pm – 2:30pm	Cath Trott (Invited talk) <i>SKA EoR Experiments</i>	25 mins + 5 mins Q&A
2:30pm – 3:00pm	Bart Pindor (Invited talk) <i>EoR Challenges for the SKA</i>	25 mins + 5 mins Q&A
3:00pm – 3:20pm	Katie Mack <i>What the SKA can tell us about dark matter</i>	15 mins + 5 mins Q&A
3:20pm – 3:40pm	Kate Chow <i>Australia's RFI-quiet site: enabling world-class radioastronomy</i>	15 mins + 5 mins Q&A

3:40pm – 3:55pm	Afternoon Tea	
3:55pm – 5:00pm	Discussion: Core science interests – report back session Session Chair – Darren Croton	
	Breakout Groups Cosmology Blake EoR/Cosmic Dawn Trott Magnetism & Milky Way Lenc Transients & Pulsars incl. strong tests of gravity Bhat Cradle of life Morrison Continuum surveys Seymour HI galaxies incl. absorption Kilborn	65 mins
5:00pm – 5:30pm	Christian Reichardt (Invited talk)	25 mins + 5 mins Q&A
5:30pm	<b>CLOSE FOR THE DAY</b>	
	Dinner – own choice	

## Day 2 – Thursday 9 April 2015

Time	ITEM	Time
	<b>Cosmology</b> Session Chair – Matthew Whiting	
9:00am – 9:30am	Chris Blake (invited talk) <i>Cosmology with the SKA</i>	25 mins + 5 mins Q&A
9:30am – 9:50am	Laura Wolz <i>Intensity mapping with the SKA</i>	15mins + 5 mins Q&A
9:50am – 10:20am	Chris Power (Invited talk) <i>Galaxy formation predictions for SKA HI surveys</i>	25 mins + 5 mins Q&A
10:20am – 10:40am	Hansik Kim <i>Probing photoionisation feedback</i>	15 mins + 5 mins Q&A
<b>10:40am – 11:00am</b>	<b>Morning Tea</b>	
	<b>SKA HI through the ages</b> Session Chair – Jill Rathbone	
11:00am – 11:20am	Lister Staveley-Smith <i>HI surveys in the era of SKA1</i>	15 mins + 5 mins Q&A
11:20am – 11:40am	Attila Popping <i>First Results of the COSMOS HI Extragalactic Survey (CHILES)</i>	15 mins + 5 mins Q&A
11:40am – 12:00pm	Luca Cortese <i>HIGHz: a survey of the gas content of the most massive galaxies</i>	15 mins + 5 mins Q&A
12:00pm – 12:30pm	Martin Meyer (Invited talk) <i>HI surveys with the re-baselined SKA</i>	25 mins + 5 mins Q&A
12:30pm - 12:50pm	Simon Ellingsen <i>The structure and motions of the Milky Way and the Local Group through VLBI and the SKA</i>	15 mins + 5 mins Q&A
<b>12:50pm – 2:00pm</b>	<b>Lunch</b>	
	<b>Galaxy Evolution</b> Session Chair – Sarah Maddison	
2:00pm – 2:30pm	James Allison (Invited talk) <i>Cool outflows and HI Absorbers with the SKA</i>	25 mins + 5 mins Q&A
2:30pm – 2:50pm	Stephen Curran <i>Unveiling a Hidden Population of high redshift galaxies with the SKA</i>	15 mins + 5 mins Q&A

2:50pm – 3:20pm	Nick Seymour (Invited talk) <i>Continuum surveys with the SKA1</i>	25 mins + 5 mins Q&A
3:20pm – 3:40pm	Paolo Serra <i>The low column density HI Universe</i>	15 mins + 5 mins Q&A
<b>3:40pm – 4:00pm</b>	<b>Afternoon Tea</b>	
	<b>Magnetism and the Milky Way Session Chair – Christopher Herron</b>	
4:00pm – 4:30pm	Melanie Johnston-Hollitt (Invited talk) <i>Magnetism</i>	25 mins + 5 mins
4:30pm – 5:00pm	Naomi McClure-Griffiths (Invited talk) <i>Milky Way Studies with the SKA</i>	25 mins + 5 mins
5:00pm – 5:20pm	Stas Shabala <i>Quasars and AGN</i>	15 mins + 5 mins Q&A
5:20pm – 5:40pm	Katinka Gereb On the interplay between gas and radio AGN	15 mins + 5 mins Q&A
<b>6:30pm</b>	<b>Dinner Naughtons Parkville Hotel, Royal Parade, Parkville Melbourne</b>	

## Day 3 – Friday 10 April 2015

Time	ITEM	Time
	<b>Transients</b> Session Chair – Philip Lah	
9:00am – 9:30am	George Hobbs (invited talk) <i>The SKA and Pulsar Timing Arrays</i>	25 mins + 5 mins Q&A
9:30am – 9:50am	Andrew Jameson <i>Pulsar timing instrumentation with SKA1</i>	15 mins + 5 mins Q&A
9:50pm – 10:10am	Ramesh Bhat <i>Low frequency pulsar astronomy with the MWA and SKA-low</i>	15 mins + 5 mins Q&A
10:10am – 10:30am	Emily Petroff <i>Fast Radio Burst in the lead-up to the SKA era</i>	15 mins + 5 mins Q&A
<b>10:30am – 11:00am</b>	<b>Morning Tea</b>	
	<b>Session Chair – Katie Mack</b>	
11:00am – 11:30am	Tara Murphy (Invited talk) <i>Transients with the SKA</i>	25 mins + 5 mins
11:30am – 11:50am	Christopher Fluke <i>Cubes in a CAVE: visualisation and analysis challenges for the SKA era</i>	15 mins + 5 mins Q&A
11:50am – 12:10pm	Andrew Walsh <i>Surveys of the Galactic Plane with the SKA</i>	15 mins + 5 mins Q&A
12:10pm – 12:30pm	Randall Wayth <i>SKA-low and the aperture array verification system</i>	15 mins + 5 mins Q&A
12:30pm – 12:50pm	Warrick Couch <i>Optical/IR – the big picture</i>	15 mins + 5 mins Q&A
<b>12:50pm – 1:30pm</b>	<b>Lunch</b>	
1:30pm – 3:00pm	<b>Discussion – Impacting SKA-Aus-NZ pre-cursor Science</b> Session Chair –Warrick Couch	90 mins
3:00pm – 3:30pm	<b>Conference Summary – Carole Jackson</b>	30 mins
<b>3:30pm – 4:00pm</b>	<b>Afternoon Tea</b>	
<b>4:00pm</b>	<b>CLOSE FOR THE DAY</b>	