

# INAUGURAL AUSTRALIA CHINA WORKSHOP ON ASTROPHYSICS: PROGRAM

# 5<sup>th</sup> – 7<sup>th</sup> April 2016 Rendezvous Hotel, Perth, WA, Australia

### **TUESDAY 5 APRIL 2016**

Time	Item
8:30am – 9:25am	Registration Desk Opens Rendezvous Hotel
9:25am	Announcements – Kate Gunn
9:30am – 9:50am	WELCOME CEREMONY Brian Schmidt and Lifan Wang
Session 1: Antarctic Astronomy and Dome A Session Chair: Lister Staveley-Smith Location: Preston Room B	
9:50am – 10:20am	Jeremy Mould (invited talk)  The Kunlun Infrared Sky Survey  (25 min presentation + 5 mins Q&A)
10:20am – 10:40am	Xiangyan Yuan  Progress of Antarctic Survey Telescopes  (15 min presentation + 5 mins Q&A)
10:40am – 11:10am	Morning Tea Preston B pre-function
11:10am – 11:40am	Ji Yang (invited talk)  Antarctic Observatory at Done A, Chinese Kunlun Station – Progress Report  (25 min presentation + 5 mins Q&A)
11:40am – 12:00pm	Michael Burton  Science with KISS and DATE5  (15 min presentation + 5 mins Q&A)



#### **ACAMAR PROGRAM**

12:00pm – 12:20pm	Hui Zhang  Looking for the hottest planet at Antarctica  (15 min presentation + 5 mins Q&A)
12:20pm – 12:40pm	Lifan Wang  Detection of Intraday Supernovae with the Antarctic Survey Telescope  (15 min presentation + 5 mins Q&A)
12:40pm – 1:40pm	Lunch Straits Cafe

### Session 2: Antarctic Astronomy and Gravitational Waves

Session Chair: Lifan Wang Location: Preston Room B

1:40pm – 2:00pm	Jon Lawrence  The AST3-NIR Camera for the Kunlun Infrared Sky Survey  (15 min presentation + 5 mins Q&A)	
2:00pm – 2:20pm	David Blair  Australia-China Collaboration in Gravitational Wave Astronomy  (15 min presentation + 5 mins Q&A)	
2:20pm – 2:40pm	Junwei Cao  Gravitational-wave Burst Analysis using Machine (15 min presentation + 5 min Q&A)	Learning
2:40pm – 3:00pm	Ryan Shannon  Pulsar Science in the Era of FAST: Pulsar Timing Ai  (15 min presentation + 5 mins Q&A)	rrays and Gravitation Waves
3:00pm – 3:20pm	Shi Dai Searching for Pulsars in Radio Continuum Images (15 min presentation + 5 mins Q&A)	
3:20pm – 3:40pm	Afternoon Tea Preston B pre-function	
3:40pm – 4:40pm	BREAKOUT: ACAMAR (Chairs: Schmidt and Wang)	BREAKOUT: Gravity Waves (Chairs: Blair and Cao)
4:40pm – 5:40pm	BREAKOUT: ACAMAR cont	BREAKOUT: Antarctic Astronomy – KISS (Chairs: Mould and Cui)
6:00pm – 8:00pm	WELCOME RECEPTION FOR REGISTERED PARTICION Kitson Room	PANTS AND VIP INVITEES

### **WEDNESDAY 6 APRIL 2016**

Time	Item
7:00am	Optional Activity  Morning Walk – please meet Kate Gunn in reception
8:00am – 8:50am	Registration Desk Open
8:55am	Announcements – Kate Gunn
Session 3: Big Data Challenges in Astronomy	

Session Chair: Di Li

**Location: Preston Room B** 

9:00am – 9:30am	Peter Quinn (invited talk) Big Data Challenges and Solutions for Astronomy in the Era of SKA (25 min presentation + 5 min Q&A)
9:30am – 9:50am	Andreas Wicenec  SKA Science Data Processing Prototyping Activities  (15 min presentation + 5 min Q&A)
9:50am – 10:10am	Mingmin Chi  SKA Science Data Processor and Computer Architecture Innovation  (15 min presentation + 5 min Q&A)
10:10am – 10:30am	Jessica Chapman  The CSIRO ASKAP Science Data Archive: Progress and Plans  (15 min presentation + 5 min Q&A)
10:30am – 11:00am	Morning Tea  Preston B pre-function

## Session 4: Big Data (contd) and Astrophysics

Session Chair: Jing Wang Location: Preston Room B

11:00am – 11:20am	Chen Wu  Scheduling Data-Intensive Processing Pipelines for the SKA Science Data Processor  (15 min presentation + 5 min Q&A)
11:20am – 11:40am	Yeshe Fenner  All-Sky Virtual Observatory  (15 min presentation + 5 min Q&A)
11:40am – 12:00pm	John Zic  Pulsar Data Processing using Amazon Web Services  (15 min presentation + 5 min Q&A)



#### **ACAMAR PROGRAM**

12:00pm – 12:20pm	Naomi McClure-Griffiths  Dark Gas in the Milky Way and Magellanic System  (15 min presentation + 5 min Q&A)	1
12:20pm – 12:25pm	Breakout Session Update - Gravity Waves (Blair/Cao) [2 mins] - Antarctic Astronomy KISS (Mould/Cui) [2 mins]	
12:25pm – 1:20pm	Lunch Straits Café	
Session 5: Astrophysics and Australia/China cooperation Session Chair: George Heald Location: Preston Room B		
1:20pm – 1:40pm	Jing Wang  Forming the Outskirts of Massive Disk Galaxies  (15 min presentation + 5 min Q&A)	
1:40pm – 2:00pm	Luca Cortese  Galaxy Transformation in the Local Universe: from (15 min presentation + 5 min Q&A)	n Arecibo and SAMI to FAST and CHILI
2:00pm – 2:20pm	Barbara Catinella  Cold Gas in Galaxies: Single-Dish Surveys in the SK  (15 min presentation + 5 min Q&A)	'A Era
2:20pm – 3:00pm	PANEL DISCUSSION Chair: Naomi McClure-Griffiths Members: Elaine Sadler, David Luchetti Fostering Australia-China Collaborations	
3:00pm – 3:30pm	Afternoon Tea  Preston B pre-function	
3:30pm – 4:30pm	BREAKOUT: Pulsars and FAST (Chairs: Li and Shannon)	BREAKOUT: SKA Regional and Science Centres (Chairs: Quinn and Chi)
4:30pm – 5:30pm	BREAKOUT: Antarctic Astronomy – Plato/Kunlun (Chairs: Ashley and Wang)	BREAKOUT: SDP and Pathfinders (Chairs: Wicenec)
6:00pm – 9:00pm	WORKSHOP DINNER Kitson Room	

### **THURSDAY 7 APRIL 2016**

Time	Item	
7:30am	Optional Activity: Tai Chi – please meet Kate Gunn in reception	
8:00am – 8:50am	Registration Desk Open	
8:55am – 9:00am	Announcements	
Session 6: Radio Astronomy, SKA and Pathfinders Session Chair: Elaine Sadler Location: Preston Room B		
9:00am – 9:30am	Bo Qin (invited talk)  SKA in China  (25 min presentation + 5 min Q&A)	
9:30am – 10:00am	Lisa Harvey-Smith (invited talk)  The Australian SKA Pathfinder  (25 min presentation + 5 min Q&A)	
10:00am – 10:20am	Xuelei Chen The Tianlai 21cm Intensity Mapping Pathfinder Experiment (15 min presentation + 5 min Q&A)	
10:20am – 10:40am	Nick Seymour  Exploring the Radio Universe Through Continuum Surveys  (15 min presentation + 5 min Q&A)	
10:40am – 11:10am	Morning Tea  Preston B pre-function	
Session 6 (contd) Session Chair: Xuelei Chen		
11:10am – 11:40am	Di Li (invited talk)  The Status of FAST and Possible Synergy Between Chinese and Australian Radio Communities  (25 min presentation + 5 min Q&A)	
11:40am – 12:00pm	Attila Popping  FAST Detections of Neutral Hydrogen in the Intergalactic Medium  (15 min presentation + 5 min Q&A)	



#### **ACAMAR PROGRAM**

12:00pm – 12:20pm	Randall Wayth  The Murchison Widefield Array  (15 min presentation + 5 min Q&A)
12:20pm – 12:30pm	Breakout Session Update  - Pulsars and FAST (Li/Shannon) [2 mins]  - SKA Regional and Science Centres (Quinn/Chi) [2 mins]  - Antarctic Astronomy Plato/Kunlun (Ashley/Wang) [2 mins]  - SDP and Pathfinders (Wicenec/Chen) [2 mins]
12:30pm – 12:40pm	CLOSING REMARKS Elaine Sadler and Ji Yang
12:40pm – 1:40pm	LUNCH
1:30pm	SOCIAL ACTIVITY Perth Zoo Planetarium – SciTech: Capturing the Cosmos