

Deep Surveys of the Radio Universe with SKA Pathfinders

Program v.25/3/08

Registration - a registration table will be open from 8.00am – 4pm

Monday 31 st March 2008		DAY 1
Venue: UWA University Club Theatre Auditorium		
Posters: Banquet Hall		
Session 1: WELCOMING REMARKS		
09:15	<ul style="list-style-type: none"> • Professor Joan Winch, Noongar elder • Professor Alan Robson, UWA Vice Chancellor • Professor Lyn Beazley, WA Chief Scientist 	
Session 2: TOWARDS THE SKA: PATHFINDER SCIENCE AND TECHNICAL OVERVIEW <i>Chair: Lister Staveley-Smith</i>		
09:40	Richard Schilizzi*	<i>The SKA and its Pathfinders - an overview</i>
10:10	Joseph Lazio	<i>The SKA Reference Science Mission</i>
10:30	Ronald Nijboer*	<i>The LOFAR Imaging Radio Telescope</i>
11:00	Morning Tea	
11:30	Dave DeBoer*	<i>The Australian SKA Pathfinder (ASKAP): an Overview</i>
12:00	Justin Jonas*	<i>MeerKAT Science and Technology</i>
12:30	Michael Kramer*	<i>Pulsars: The Way to the SKA</i>
13:00	Lunch	
Session 2: (contd)		<i>Chair: Peter Quinn</i>
14:00	Andrei Lobanov*	<i>High-Resolution Science with SKA Pathfinders</i>
14:30	Naomi McClure-Griffiths	<i>Exploring the Disk-Halo Interaction of the Milky Way with the Telescopes of Today and Tomorrow</i>
14:50	Renée Kraan-Korteweg	<i>Who is Pulling in the Zone of Avoidance? – the GA/Shapley Controversy</i>
15:10	Aris Karastergiou	<i>Pulsar Emission Physics with SKA Pathfinders</i>
15:30	Afternoon Tea	
16:00	Tim Cornwell*	<i>Computing Challenges for SKA Pathfinders</i>
16:30	Marco de Vos*	<i>Engineering Challenges for SKA Pathfinders</i>
17:00	<i>Close of Day 1</i>	
17:00-19:00	Welcome Reception – Lower Foyer and Outside	

*Invited talk

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Tuesday 1 st April 2008		DAY 2
Venue: UWA University Club Theatre Auditorium		
Posters: Banquet Hall		
Session 3: PATHFINDER PROJECTS		Chair: Richard Schilizzi
09:00	Ken Kellermann*	<i>Deep Surveys with the EVLA: Opportunities and Challenges</i>
09:30	James Cordes*	<i>The SKA as a Radio Synoptic Survey Telescope</i>
10:00	Mike Garrett	<i>E-LOFAR and Deep Field Surveys</i>
10:20	Timothy Garn	<i>Deep Surveys at 610 MHz to probe the FIR/Radio Correlation to $z \sim 1$</i>
10:40	Simon Johnston	<i>Science with ASKAP</i>
11:00	Morning Tea	
Session 3: (contd)		Chair: Rachel Webster
11:30	Leo Blitz*	<i>The Allen Telescope Array</i>
12:00	Colin Lonsdale*	<i>The Murchison Widefield Array</i>
12:30	Rendong Nan*	<i>Project FAST: Five hundred metre aperture Spherical Radio Telescope</i>
13:00	Lunch	MWA Phase 2 NCRIS breakout session (Webster)
Session 3 (contd):		Chair: Steven Tingay
14:20	Sparkler talks	<i>Poster presenters</i>
14:40	Andy Faulkner*	<i>Aperture Arrays</i>
15:10	Joseph Lazio*	<i>Surveys at Long Wavelengths – Towards the LWA</i>
15.40	Afternoon Tea	
16:10	Marc Verheijen*	<i>APERTIF: current status and proposed surveys</i>
16:40	Geoff Bower*	<i>Wide-Field Radio Transient Surveys</i>
17:10	<i>Close of Day 2</i>	
18:00-19:00	Public Lecture in the UWA Octagon Theatre: Professor Shri Kulkarni “An Explosion of Cosmic Explosions”	

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Wednesday 2 nd April 2008		DAY 3
Venue: UWA University Club Theatre Auditorium		
Posters: No poster session today (Banquet Hall unavailable)		
Session 4: PATHFINDER SYNERGIES		Chair: Ken Freeman
09:00	Garth Illingworth*	<i>ELTs, STs and High Redshift Galaxies</i>
09:30	Karl Glazebrook*	<i>From HI to HII: enabling deep and wide optical redshift surveys matched to ASKAP</i>
10:00	Matt Jarvis	<i>Multi-wavelength surveys; synergies with the SKA and its pathfinders</i>
10:20	Andrew Hopkins	<i>Galaxy and Matter Assembly</i>
10:40	Stefan Keller	<i>SkyMapper and SKA Pathfinders</i>
11:00	Morning Tea	
Session 5: COSMOLOGY AND SIMULATIONS		Chair: Robert Braun
11:30	Erwin De Blok*	<i>Galaxy Dynamics and Pathfinder Science</i>
12:00	Stuart Wyithe*	<i>Epoch of Reionization Studies with SKA Pathfinders</i>
12:30	Ilian Iliev	<i>The Dark Ages and the Epoch of Reionization: What do State-of-the-Art Simulations Tell Us?</i>
12:50	Asantha Cooray	<i>Cosmological studies with low-frequency radio interferometers and 21-cm line during and prior to reionization</i>
13:10	Lunch	
Session 5: (contd)		Chair: Ilana Feain
14:10	Chris Blake*	<i>Cosmology with SKA Pathfinders</i>
14:40	Steve Rawlings*	<i>Simulating the Radio Universe</i>
15:10	Richard Wilman	<i>SKADS Simulated Skies: the semi-empirical extragalactic simulation</i>
15.30	Afternoon Tea	
Session 5: (contd)		Chair: Elaine Sadler
16:00	Martin Meyer	<i>Simulating the HI Universe</i>
16:20	Attila Popping	<i>The Simulated HI Sky</i>
16:40	Danail Obreschkow	<i>The HI mass Tully-Fisher Relation</i>
17:00	<i>Close of Day 3</i>	
19:15 for 19:30	Conference dinner at Matilda Bay Restaurant (by ticket only)	

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Thursday 3 rd April 2008		DAY 4
Venue:	UWA University Club Theatre Auditorium	
Posters:	Banquet Hall	
Session 6: TOWARDS HIGH ENERGY AND HIGH REDSHIFT		Chair: Justin Jonas
09:00	Shri Kulkarni*	<i>The High-Energy Universe</i>
09:30	Matthew Bailes	<i>Fast Transient and pulsar Detection with large-scale synthesis arrays from the pathfinders to the SKA</i>
09:50	Jasper Wall*	<i>AGNs and SKA Pathfinders</i>
10:20	Isabella Prandoni	<i>A view of the sub-mJy radio population: the AGN component</i>
10:40	Elaine Sadler	<i>Probing the low surface-brightness radio sky</i>
11:00	Morning Tea	Chair: Tom Oosterloo
11:30	Paul Bourke	<i>ASKAP Site Visualisation</i>
11:40	Enno Middelberg	<i>VLBA observations of 96 sources in the Chandra Deep Field South</i>
12:00	Seungyoun Chi	<i>Deep, wide-field global VLBI observations of the HDF-N and HFF</i>
12:20	Neeraj Gupta	<i>GMRT survey of 21-cm absorption in the intermediate redshift DLA candidates</i>
12:40	Phillip Lah	<i>HI in Galaxies at Redshifts 0.1 to 1.0: Current and Future Observations using Optical Redshifts for HI Coadding</i>
13:00	Lunch	Chair: Simon Johnston
14:00	Bryan Gaensler*	<i>The Magnetic Universe Probed with SKA Pathfinders</i>
14:30	Jeroen Stil	<i>The Nature of Faint Polarized Radio Sources</i>
14:50	Maik Wolleben	<i>The Global Magneto-Ionic Medium Survey</i>
15:10	Joern Geisbuesch	<i>Inferring source polarisation properties from SKA observations</i>
15.30	Afternoon Tea	Chair: Rendong Nan
16:00	George Heald	<i>The Westerbork SINGS Survey: Faraday Rotation and Magnetic Fields</i>
16:20	Thijs van der Hulst	<i>Surveying low surface brightness HI and the prospects for SKA</i>
16:40	Hayley Bignall	<i>Statistics of Interstellar Scintillation from the MASIV Survey: Implications for SKA Pathfinder Surveys</i>
17:00	Close of Day 4	
17:00-19:00	Jazz Sundowner at University Club (ground level foyer/outside)	

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Friday 4 th April 2008		DAY 5
Venue: UWA University Club Theatre Auditorium		
Posters: Banquet Hall		
Session 7: PROGRESS IN INSTRUMENTATION, SCIENCE AND ALGORITHMS		
<i>Chair: Peter Hall</i>		
09:00	Bruce Veidt*	<i>Focal-Plane Array Development in Canada</i>
09:30	Marianna Ivashina*	<i>Characterization of Efficiency, System Noise Temperature and Sensitivity of Focal Plane Array Receiving Systems</i>
10:00	Wim van Cappellen	<i>Initial results of the digital focal plane array demonstrator for APERTIF</i>
10:20	Sanjay Bhatnagar*	<i>Low-Frequency Imaging Challenges with SKA Pathfinder</i>
10:50	Morning Tea	
Session 7: (contd)		<i>Chair: Tim Cornwell</i>
11:20	Bill Cotton*	<i>The Effect of the Ionosphere on SKA Pathfinder</i>
11:50	Sarod Yatawatta*	<i>Calibration Challenges: Lessons Learnt from LOFAR</i>
12:20	Huib Intema	<i>A New Method for Ionospheric Calibration of Low Frequency Arrays</i>
12:40	James Anderson	<i>LOFAR Ionospheric Calibration for Surveys and Cosmic Magnetism</i>
13:00	Lunch	
Session 7: (contd)		<i>Chair: Dave DeBoer</i>
14:00	Justin Kasper*	<i>Solar and Heliospheric Science with SKA Pathfinder</i>
14:30	V.N. Pandey	<i>Initial Deep All Sky Images with LOFAR</i>
14:50	Peter Hall*	<i>PrepSKA: A Regional Contributor's Perspective</i>
15:20	Mike Warren	<i>Peta-scale Astronomical Data Processing, Analysis and Modeling</i>
15.40	Afternoon Tea	
16:10	Conference Summary	
16:20	<i>Close of conference</i>	

*Invited talk

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Posters

First Author	Title
R. Auld	HI source detection in the era of the SKA
D. Backer	Calibration and Imaging Results from the Precision Array to Probe the Epoch of Reionization
T. Colegate	Science Context for Cost and Performance Modelling of the Square Kilometre Array
D. Coward	The frontier of transient astronomy: new data analysis tools for probing the Universe with gamma ray bursts
S. Croft	Wide-Field Extragalactic Radio Astronomy with the Allen Telescope Array
A. Datta	VLA-COSMOS Survey - an update
R. Deane	Sub-kpc scale observations of HI and star formation in the nearby giant LSB galaxy NGC 1512
S. Frey	Decaparsec-scale morphology of the most distant (known to date) radio QSO J1427+3312 at $z=6.12$
O. Giersch	CME Indices from MWA Data
G. Giovannini	Non thermal emission in galaxy clusters
A. Green	The SKA Molonglo Prototype (SKAMP) Project
C. Harris	GPU FX Spectrometer using CUDA
A. Hopkins	Deep ASKAP observations of the GAMA survey area
M. Huynh	Faint radio sources in the FIDEL Spitzer Legacy Survey
M. Johnston-Hollitt	Understanding the radio properties of clusters of galaxies with future radio telescopes
M. Kuniyoshi	Simulations for LWA Station Beams
L. Leeuw	Synergies of MeerKAT Surveys with Selected Planned and Future Surveys
F. Levrier	The S3 databases and an application to the detection of HI at high redshift with the SKA
A. Lopez-Sanchez	The Local Volume HI Survey
T. Mauch	Investigating the sub-mJy radio source population with the WSRT
S. Schediwy	Increasing the survey speed of aperture arrays via direct front-end amplifier cooling: simulation, experimentation and verification with the 2-PAD demonstrator.
N. Seymour	Disentangling AGN and Star Formation in Deep Extragalactic Surveys
B. Stappers	Pulsar Surveys with LOFAR
G. Sundaram	MEqTrees Aperture Array Simulations and CPU Benchmarking
I. van Bemmell	Ionospheric limitations for LOFAR and SKA
W. van Driel	NIBLES: a census of SDSS galaxies in the local volume
J. van Leeuwen	Scalable computing hardware for pulsar science
D. Vir Lal	Array configuration studies for the SKA - Implementation of figures of merit based on Spatial Dynamic Range
M. Whiting	From ASKAP to the Astronomer: Source Finding and Cataloguing
K. Zarb Adami	Scaleable Signal Processing Architectures for All-Digital Aperture Arrays