



AGENDA

4th SKADS WORKSHOP

2 - 3 October 2008 at Instituto Superior Técnico, IST, Lisbon

Purpose: Review SKADS progress
Identify any deliverables 'at risk'
Assess technological readiness of sub-systems
Plan successful completion of SKADS
Consider transition to PrepSKA

- Activity focussed around evolving Deliverables and technical readiness
- Mechanism
 - Arrange by topic
 - Need to deliver a viable and thought out design-scenario for SKA
 - Identify the difficult elements of the system design and the approach to their resolution

REGISTRATION

Reception and registration Wednesday, 1 October, 2008 from 18:30 till 20:00

Instituto Superior Técnico, Salão Nobre (Building No.1 at IST map, 1st floor)

Registration fee €70,00, including dinner and lunch tickets.

DAY 1 Thursday 2 October

08.30 Registration and coffee

09.00 **Opening and Welcome** Professor Carlos Matos Ferreira, President of IST

09.05 Introduction Peter Wilkinson UMan

09.20 Overview SKADS – into final year Arnold van Ardenne ASTRON

09.40 SKADS and SKA Andrew Faulkner UCam

09.55 SKADS Science and Engineering Steve Torchinsky OPar

10.10 **Science and Data Simulations** Chair: Thijs van der Hulst

Science Simulations overview 10 min Steve Rawlings UOxf

Pulsars 10 min Roy Smits UMan

An inventory of the SKADS tools to a full SKA simulation 10 min Hans-Rainer Kloeckner UOxf

Epoch of Reionisation 10 min Mario Santos CENTRA-IST

The evolution of magnetic fields in galaxies 10 min Tigran Arshakian MPIfR

11.00 *Coffee Break*

11.20 Data simulations overview 10 min Jan Noordam ASTRON

Array Configuration Studies 10 min Dharam Vir Lal MPIfR

Simulated Observations 10 min Robbie Auld Cardiff

SKADS Sky databases 10 min Francois Levrier UOxf

Discussion 10 min

12.10 *Lunch at Restaurant Diamantino*

13.30 **System Design** Chair: Paul Alexander

Design and Costing - 2 20 min Rosie Bolton UCam

AA simulations 10 min Ben Mort UOxf

SD - 1 10 min Laurens Bakker ASTRON

SD - 2 10 min Philippe Picard OPAR

Sensitivity, the challenges 20 min. Jan Geralt bij de Vaate ASTRON

Discussion 10 min

14.50 **Technologies – 1a** Chair: Jan Geralt bij de Vaate

EMBRACE 20 min Dion Kant ASTRON

Prototype tile measurements 10 min Mark Ruiter ASTRON

Solar drift scans 10 min Henrik Olofsson OPAR

15.30 *Tea Break*

15.50	Technologies – 1b			
	Antenna simulation, realization and verification	10 min	Michel Arts	ASTRON
	Antenna simulations	10 min	David Zhang	UMan
	CMOS for LNA's	10 min	Leo Belostotski	Uni Calgary
			(presented by Andrew Faulkner)	
	Progress in differential amplifiers	10 min	Oscar Garcia Pérez	FG
	Results with InP	10 min	Boume Boudjelida	UMan
	Progress in LNA's using GaAs and SiGe	10 min	Danielle Kettle	UMan
			(presented by Jan Geralt bij de Vaate)	
	<i>Discussion</i>	<i>10 min</i>		

17.00	Technologies - 2		Chair:	Mike Jones
	2-PAD	20 min	Georgina Harris/Tony Brown	UMan
	2-PAD from antennas to beamforming	10 min	Kris Zarb Adami	UOxf
	Analogue beamforming	10 min	Séverin Barth	OPAR
	Digital beamforming	10 min	Aziz Ahmedsaid	UMan
	Processing technologies	10 min	Chris Shenton	UMan
	<i>Discussion</i>	<i>10 min</i>		

18.10 *Close*

19.30 *Conference dinner:*
Casa do Alentejo
Rua Portas de Santo Antão, 58
1150-268 Lisboa
Tel. +351 213 405 140

(for directions please visit the workshop webpage <http://gamow.ist.utl.pt/~centra/4thSKADS/>)

DAY 2 Friday 3 October

8.30	Technologies - 3		Chair: Wim van Driel	
	BEST	20 min	Stelio Montebugnoli	INAF-IRA
	BEST receivers	10 min	Jader Monari	INAF-IRA
	BEST optical links	10 min	Federico Perini	INAF-IRA
	Progress in Active Antenna Design & Development	10 min	Tim Finn	FG
	Wide area comms & phase transfer	20 min	Roshene McCool	SPDO
	RF fiber optics	10 min	Thomas Berenz	MPIfR
	RFI mitigation developments	10 min	Cédric Viou	OPAR
	Back-end processing	10 min	André Gunst	ASTRON
10.00	Technical Readiness Review	10 min	Andrew Faulkner	UMan
	Discussion	20 min		
10.30	<i>Coffee Break</i>			
10.55	From SKADS to PrepSKA, pathfinder status		Richard Schilizzi	SPDO
	Deliverable status review		Chair: Andre van Es	
11.15	DS2-T1 Science simulations		Thijs van der Hulst	RUG
	DS2-T2 Data Simulations		“	
11.25	DS3-T1 Network Infrastructure & Data Transmission		Paul Alexander	UCam
	DS3-T2 Data Handling, Control & Dist. Computing		“	
	DS3-T3 Architecture and the Network Simulator		“	
	DS3-T4 A study of siting and related issues		“	
	DS3-T5 SKA for the user		“	
	DS3-T6 Scaleable design and implementation		“	
11.35	DS4-T1 Front End technologies		Andrew Faulkner	UMan
	DS4-T2 Signal Control & digitisation		“	
	DS4-T3 RFI mitigation techniques		“	
	DS4-T4 Wideband integrated antennas		“	
	DS4-T5 Beam forming at patch level		“	
	DS4-T6 The 2-PAD demonstrator		“	
11.45	DS5-T1 Design of EMBRACE		Dion Kant	ASTRON
	DS5-T2 Development of EMBRACE as a system		“	
	DS5-T3 EMBRACE assessment of performance		“	
11.55	DS6-T1 Design of sub-systems		Stelio Montebugnoli	INAF-IRA
	DS6-T2 Development and demonstration		“	
	DS6-T3 Assessment of performance		“	
	DS6-T4 Phased arrays on concentrators		“	
12.05	Overall Discussion		Chair: Arnold van Ardenne	
12.20	Conclusions		Peter Wilkinson	UMan
12.30	<i>End of Workshop</i>			
	<i>Lunch at Restaurant Diamantino</i>			