

AGENDA

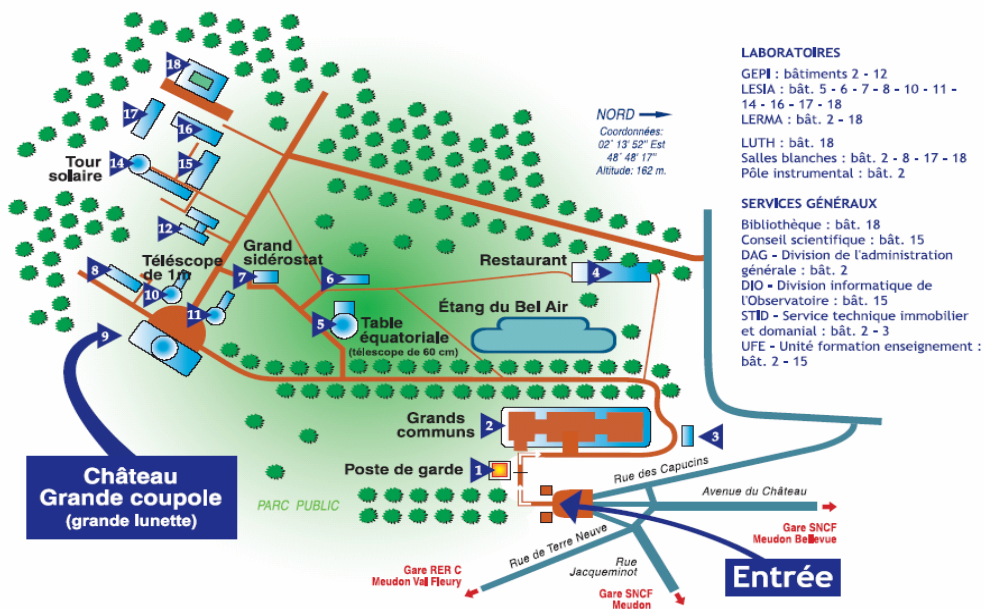
2ND SKADS WORKSHOP

10-11 October 2007 in OBSERVATOIRE DE PARIS, site MEUDON

(12 October 2007 Mid Term Review (SKADS MT))

Purpose: Review SKADS progress
Discuss opportunities and risks
Prepare for Mid-Term Review: the 12th
Prepare SKADS for 2nd half of project

- Activity focussed around evolving SKADS Benchmark Scenario
- Mechanism
 - Arrange by topic rather than DS (can read Annual Report for that)
 - 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
 - Use the opportunity to form Work teams to think about issues



DAY 1

09.00 hr Registration and coffee
Parallel: SKADS Design Study meetings

Workshop START

- 11.15 hr Opening and Welcome Host (Daniel Egret)
11.20 hr Introduction (Peter Wilkinson: "What is it about")
11.35 hr Overview SKADS at intermediate stage (Arnold van Ardenne, ASTRON)
11.50 hr The design reference; Current SKADS Benchmark Scenario (Andrew Faulkner, UMan)
- 12.10 hr System level Costing (Paul Alexander, UCam)
12.30 hr Simulations; the loop from Science to Engineering and back (Steve Torchinsky, OPar)
- 12.50 hr **Selected Topics 1 Science and Data Simulations**
Chair: Thijs van der Hulst
- Science Simulations (Steve Rawlings, UOxf, 20 min)
 - EoR (Paola di Matteo, OPar, 10 min.)
 - Pulsars (Roy Smits, UMan, 10 min.)
- 13.30 hr Lunch
- 14.45 hr **Selected Topics 1 Science and Data Simulations (Cont.)**
- Large Scale Structure (Danail Obreschkow, UOxf 10 min.)
 - Cosmic Magnetism (Tigra Arshakian, MPIfR, 10 min.)
 - Astronomical Data Simulations (Cormac Reynolds, JIVE, 20 min.)
 - Array Configuration Studies (Dharam Vir Lal, MPIfR (15 min.)
- 15.45 hr *Tea break*
- 16.00 hr **Selected Topics 2 The Instrument as a System**
Chair: Rosie Bolton
- System design & configuration
 - Astronomical Response of aperture arrays (Nima Razavi, UCam, 15 mn.)
 - Calibration and Changing beam response (Jan Noordam, ASTRON, 15 min.)
 - System design and RFI (Pierre Colom, OPar, 15 min.)
 - Station Functional Simulator (Kristian Zarb Adami, UOxf, 15 min.)
 - Wide Area Communications and Phase transfer
 - Network infrastructure technologies and components (Peter Maat, ASTRON, 15 min.)
 - Phase transfer & custom communications (Roshene McCool, UMan, 15 min.)
- 17.30 hr Close of first day
- 19.00 hr *Conference dinner at Eiffeltower (details will follow)*

DAY 2

- 09.00 hr **Selected Topics 3 Key Technologies**
Chair: Parbhu Patel
- Wide Band Integrated Antennas and Design Tools
 - Differential dual polarized antenna design (Eloy Acedo, FGN/UCam, 15 min.)
 - The design of wide-band dense arrays (Rob Maaskant, ASTRON, 15 min.)
 - Sparse arrays geometries (Ahmed Makadema, UMan, 10min.)
 - Wide Band Low Noise Receivers
 - Technology Perspective and results with mHEMT's (Jan Geralt bij de Vaate, ASTRON, 15 min.)
 - Low noise MMIC's for the SKA (Sébastien Delcourt, OMMIC, 10 min.)
 - GaAs transistor modelling (Boume Boudjelida, UMan, 10min)
 - Cooling techniques (Sascha Schediwy, UOxf, 10 min.)
- 10.30 hr *Coffee/Tea break*
- 11.00 hr **Selected Topics 3 Key Technologies (Cont.)**
Chair: Stelio Montebugnoli
- Signal Processing for beamformation
 - Analog beamforming and processing (Erik van der Wal, ASTRON, 10 min.)
 - Station digital processing (Philippe Pickard, Opar, 10 min.)
 - Digital beamformer (Chris Shenton, UMan, 10 min.)
- 11.30 hr SKADS in the global context (Richard Schilizzi, ISPO, 20 min)
- 11.50hr **Selected Topics 4 The Demonstrators**
Chair: Wim van Driel
- EMBRACE
 - The System (Dion Kant, ASTRON, 10 min.)
 - Low cost design approaches (Marco Drost, ASTRON, 10 min.)
 - 2-PAD
 - 2-PAD Infrastructure (Georgina Harris, UMan, 10min.)
 - Analogue Front-End (Tim Ikin, UMan, 10 min.)
 - BEST
 - The System (Stelio Montebugnoli, IRA, 10 min.)
 - Low cost Optical links (Jader Monari, IRA, 10 min.)
- 12.50 hr **Selected Topics 5 The Project including discussion**
Chair: Mike Jones
- Costing tool implementation (Rosie Bolton, UCam, 10 min.)
 - Technology Planning (Andrew Faulkner, UMan, 10 min.)
 - Review of SKADS deliverables and forward look (André van Es, 10min.)
- 13.30 hr *Lunch*
- 14.30 hr Conclusions (Peter Wilkinson, Arnold van Ardenne, All)
- 15.00 hr **End of workshop**

- 15.15 hr **Coordination Committee meeting (closed session)**
- Review progress, strengths and weaknesses
 - International implications etc.
 - Discuss presentation to Mid-term review