MCCT-SKADS Technical Workshop: Digital Signal Processing and the SKA
9th -13th November 2009, The University of Manchester, UK.

All talks are in the Lovell Lecture Room in the AlanTuring Building, Manchester except for Tuesday when we are at Jodrell Bank.

Programme

Monday 9th Nov

0900 Registration

0930 Welcome   (Spencer)

1000 The Square Kilometre Array (Dewdney)

1030 Coffee

1100 Introduction to Analogue Systems in Radio Astronomy (Davis)

1200 Q&A session and discussion

1230 Lunch

1330 Introduction to Systems and Digital Signal Processing (Spencer)

1430 Q&A session and discussion

1500 Tea

1530 Signal Processing requirements for the SKA (Turner)

1630 Q&A and discussion

1700 Close. The LOC recommends you try some of the local hostelries and even perhaps the Indian restaurants down Oxford Rd.

Tuesday 10th Nov

0900 Buses leave Manchester Business School for Jodrell Bank

1000 Coffee

1030 Introduction to 2-PAD (Harris)

1100 Signal Processing for 2-PAD (Shenton)

1145 e-MERLIN (Garrington)

1215 e-MERLIN correlator (Noble)

1245 Lunch

1330 Photo

1345 Tour of JBO

1445 Beamforming for 2-PAD I (Ahmed Said)

1545 Tea

1615 Beamformer architecture using the CASPER system (Naldi)

1645 Q&A and discussion

1800 Buses leave KBO main car park for the Swettenham Arms

1900 Dinner

2130 Buses leave for Manchester

2240 Buses arrive Manchester Business School

Wednesday 11th Nov

0900 Announcements

0915 Beamforming for Embrace and LOFAR (Schoonderbeek)

0945 Beamforming for 2-PAD II (Zarb Adami)

1015 Coffee

1045 Uniboard- bringing radio telescope processing to the next level (Schoonderbeek)

1115 2PAD, digital beamforming systems, and the SKA (Hickish)

1145 Three dimensional space-time filtering of FPA signals (Bruton)

1215 Q&A session and discussion

1230 Lunch

1330 1400 FPGA Based Correlators Using CASPER and the PAPER Project (Foster)

1400 Non Imaging Applications (Stappers)

1430 Tools for FPGA design (Shenton)

1530 Tea

1600 Scaling issues for the SKA I - panel discussion (Chairman: Turner)

Thursday 12th Nov SKA and DSP Industry Day

This is a separate meeting to the MCCT-SKADS - provisional timetable:

0900 Welcome and Introduction (Spencer)

0915 Bench top digital beam-forming aperture synthesis test bed
Dr Neil Salmon (Qinetiq)

0945 High Speed Multichannel FPGA Downconverter Design
  Dr G.W. Rice, Prof R. Stewart, Steepest Ascent Ltd

1015 Xilinx Devices for High Speed DSP
  Dr Louise Crockett, Xilinx Research Fellow, Univ of Strathclyde

1045 Coffee

1115 High Speed Adaptive QR Least Squares with SystemVue
  Tony Gao Univ of Strathlcyde, Frank Ditore, Agilent

1145 Keithley Instruments

1215 Image Processing and Object Recognition Techniques for Deployment on
Embedded Devices for Possible Astrophysical Instrumentation (Tickle)

1245 Lunch

1345 PicoChip (tbc)

1415 National Instruments (tbc)

1445   ClearSpeed (tbc)

1515 Tea

1545   Technologies for SKA (All)

1700 Close

Friday 13th November

0930 Conclusions and wrap up with the aim of where the priorities lie for futher
development