MIGHTEE OXFORD meeting 18-21 Sept

- **Survey strategy**
- **People to contact**
- **Working groups**
- **Early Science Commissioning**
- **MeerKLASS**
- **Final thoughts**

MIGHTEE meeting schedule #1

Day 1 - Monday 18th Sept (Start with lunch at 12.30) Talks to start at 14.00pm

14.00-14.30 Current Status of MeerKAT - Russ Taylor (Joint with ThunderKAT)
14.30-15.00 MeerKAT data so far - Ian Heywood (Joint with ThunderKAT)
15.00-15.30 Joint discussion with ThunderKAT and plans etc (Matt, Russ, Rob, Patrick)

15.30-16.00 Coffee

16.00-16.30 Overview of MIGHTEE and relation to other surveys- Matt

16.30-17.00 LADUMA101 - Andrew Baker

Day 2

09.30-10.00 Continuum science overview - I. Heywood
10.00-10.30 HI Science Overview - N. Maddox
10.30-11.00 Polarisation Science Overview - R. Taylor

11.00-11.30 coffee

11.30-12.00 HI Absorption Science overview - J. Allison
12.00-12.30 MIGHTEE VLBI - R. Deane
12.30-13.00 Multi-wavelength data and HELP - S Oliver

13.00-14.00 LUNCH

Calibration and imaging

14.00-14.30 Survey design, calibration and imaging for MIGHTEE - I Heywood
14.30-15.00 Direction Dependent Calibration and Imaging for the LOFAR surveys - M. Hardcastle
15.00-15.30 IDIA and the MIGHTEE pipeline - R. Taylor

15.30-16.00 Coffee

16.00-16.20 Fast Galaxy Evolution From z=0 to z=0.4 - S. Eales
16.20-16.40 Properties of Main Sequence star-forming galaxies before and after MIGHTEE - M. Pannella
16.40-17.10 WEAVE-LOFAR - D. Smith

17.10- Discussion time

MIGHTEE meeting schedule #2

Day 3

09.30-10.00 MIGHTEE confusions and stacking - M. Santos
10.00-10.30 X-ID's - experience from S82 survey - M. Prescott

10.30 Coffee

11.00-12.00 Oxford Seminar - The Optical Fundamental Plane of Black Hole Activity - Payaswini Saikia

12.10-12.40 Radio AGN observations and models M. Hardcastle
12.40-13.00 Exploring the radio galaxy population with MeerKAT MIGHTEE - J. Harwood

13.00 Lunch

14.00-14.20 Deep GMRT observations of ELAIS N1, radio data and source properties - E. Ocran
14.20-14.40 HERGS and LERGS in Stripe82 - I. Whittam
14.40-15.00 The clustering of radio sources from JVLA-COSMOS - C. Hale
15.00-15.30 Halo Occupation distribution modelling and MIGHTEE - P. Hatfield

15.30 Coffee

16.00-16.20 High-redshift radio sources in MIGHTEE - L. Morabito
16.20-16.40 GPz: Photometric redshifts with Gaussian Processes - Z. Gomes
16.40-17.10 Radio photo-zs and classification of radio sources with SOM - K. Duncan

Day 4

09.30-09.50 Experience from LOFAR - L. Morabito & W. Williams
09.50-10.10 Experience from JVLA - I. Heywood & Russ Taylor
10.10-10.35 Horizon-AGN simulation: HI, Magnetic fields and continuum - A. Slyz
10.35-11.00 MUFASA simulation for MeerKAT - R. Dave

11.00 -11.30 Coffee

11.30-12.30 Discussion
1. Survey strategy - pointings/fields
2. Early Science Commissioning
3. Working Group set up and working with MIGHTEE

Survey strategy

- **ECDFS**

6 sqd mosaic high pressure LADUMA will go deep in the center and use night time

- **XMMLSS**

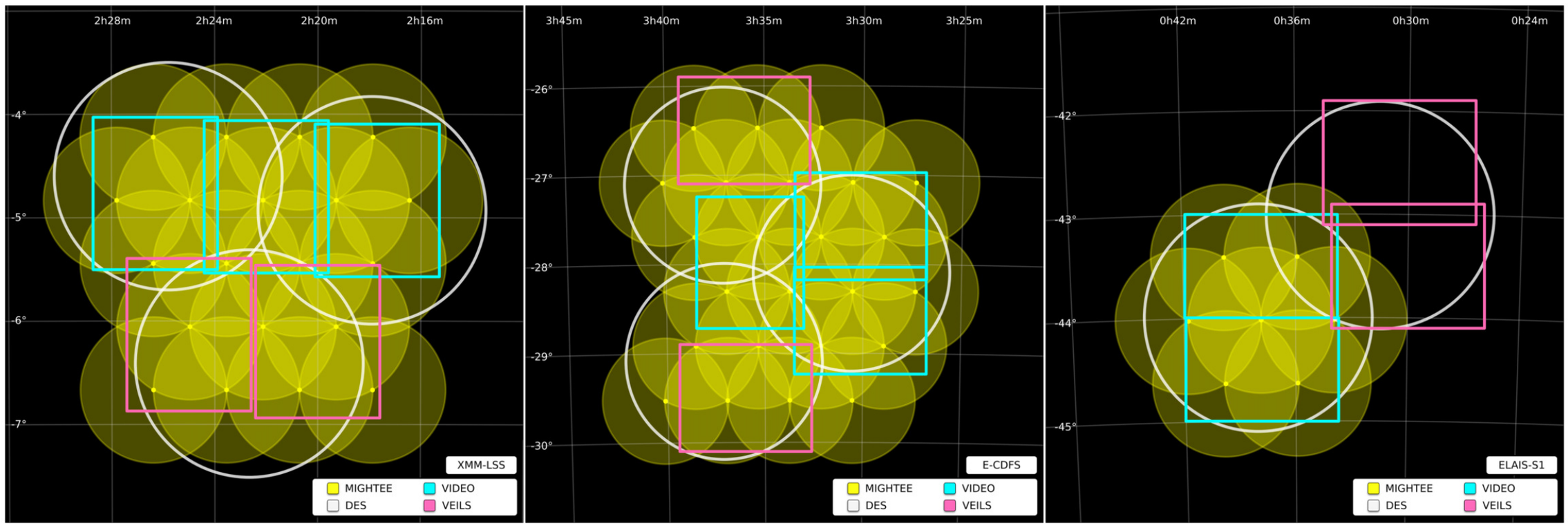
7.5 sqd mosaic high pressure

- **ES1**

3 sqd mosaic high pressure

- **COSMOS**

1.5 sqd single pointing less pressure maybe the first to hit



https://arxiv.org/pdf/1709.06099.pdf

People to contact

- **Multiwavelength**
  Matt Jarvis / Mattia Vaccari

- **Continuum**
  Ian Heywood / Kim McAlpine

- **Polarisation**
  Russ Taylor / Anna Scaife

Working groups

— Now is the time to get engaged …

— New members need to be proposed and membership will only be granted if they bring unique or needed expertise/time …

— We would like a summary of high-profile projects and "proposed" leads and why they should lead -e.g. how much time are they going to put into MIGHTEE in tech/sci/other means, noting that there are no guarantees at this point in time.

— Publications will be proposed by the membership at large and approved by WG Chairs... There will be a publication policy in place

— CyberSKA (or other standard wiki) and regular teleconfs will be used to help communication within the group and the smaller working groups

Early Science Commissioning

— **Which fields ? No need to overlap with MeerKAT fields (in principle)**

— **Need to test tech things about MeerKAT and need to make sure we can do MIGHTEE**

— **A list of ESC projects, specs for observations and science papers**

— **Working group leads inputs about changing survey specs**

MeerKLASS

— **To be proposed for MeerKAT open time observations**

— **Very similar to the original MIGHTEE Tier-1 survey**

— **Cosmology driven (PI Mario Santos)**

— **astro-ph paper on line (https://arxiv.org/pdf/1709.06099.pdf)**

— **4000 sqd at 6uJy rms**

— **Field(s) ? DES/2df/KIDS+VIKING/ACT/SPT/Herschel ?**

Final (personal) impressions

— It was not much of an organizational meeting more like a motivational or an heads up for the soon to come call to arms …

— 30ish persons and I was about the only "outsider" …

— MJ suggested me (and any other person interested within the D-MeerKAT) to get in touch with him and/or other WG leaders asap to be included in the loop …

— They seem to be very happy with the array performances and confident that the data calibration/RFI removal pipeline will not require major upgrading of already available tools (i.e., JVLA calibration CASA tools)…

— Exploiting scientifically the survey will be instead very much limited by man power resources, so …