



ThunderKAT/MeerLICHT discussion

- Updated Science Case ThunderKAT
- ThunderKAT structures (working groups)
- MeerLICHT structures
- Joint Resources
- ...



ThunderKAT Science Case

Topical? Commensal? Area?

- **Jets**

- Microquasars
- Faint outbursts
- Jets in white dwarf accretors
- Outflows in Novae

- **Extragalactic X-ray binaries**

- ULXs

- **Supernovae & GRBs**

- incl. FRBs

- **Magnetar outbursts**



ThunderKAT Surveys

Topical? Commensal? Area?

- **Galactic Bulge (945h)**
 - 12 sqd, $10\mu\text{Jy}@5\sigma$, **X-band (!)**
 - 3 nearby galaxies ($60\mu\text{Jy}@5\sigma$)
- **ToOs**
 - XRBs (**1500h**)
 - GRBs/SN Ib/c (**1750h**)
 - WDs (Cvs/Novae) (**560h**)
 - Magnetars (**200h**)
- **Known Source monitoring (1000h)**
- **Commensal**



ThunderKAT Working Groups

1. X-RAY BINARIES AND TIDAL DISRUPTION EVENTS

Rob Fender (Oxford), Phil Charles (Southampton), Stéphane Corbel (CEA Saclay), Mickäel Coriat (Toulouse), Peter Curran (Perth), Heino Falcke (Nijmegen), Peter Jonker (SRON), Tom Maccarone (Texas Tech), Simone Migliari (Barcelona), James Miller-Jones (Perth), Vanessa McBride (Cape Town), Tara Murphy (Sydney), Gijs Nelemans (Nijmegen), George Nicolson (HartRAO), Tony Rushton (Southampton)

2. CATAclysmic VARIABLES

Patrick Woudt (Cape Town), **Elmar Körding (Nijmegen)**, David Buckley (SALT), Laura Chomiuk (Michigan), Paul Groot (Nijmegen), Christian Knigge (Southampton), Tim O'Brien (Manchester), Valerio Ribeiro (Cape Town), Matthew Schurch (Cape Town), Danny Steeghs (Warwick), Brian Warner (Cape Town).

3. GAMMA-RAY BURSTS AND SUPERNOVAE

Ralph Wijers (Amsterdam), Michael Bietenholz (HartRAO/York), Frédéric Daigne (IAP), Alexander van der Horst (Amsterdam), Atish Kamble (Amsterdam), Chryssa Kouveliotou (NASA), Evert Rol (Amsterdam), Susanna Vergani (Paris/Meudon), Klaas Wiersema (Leicester).

4. ALGORITHMS AND INFRASTRUCTURE

James Miller-Jones (Perth), **Richard Armstrong (Cape Town)**, Rob Fender (Oxford), Ian Heywood (Oxford), Jasper Horrell (SKA SA), Simon Ratcliffe (SKA SA), Anna Scaife (Southampton), Ben Stappers (Manchester), Ian Stewart (Bonn), Tim Staley (Southampton), John Swinbank (Amsterdam).

5. COORDINATION FOLLOW-UP

Patrick Woudt (Cape Town), **Paul Groot (Nijmegen)**, Rob Fender (Oxford), Marissa Kotze (SAAO), Vanessa McBride (Cape Town), Takahiro Nagayama (Nagoya), Julian Osborne (Leicester), Valerio Ribeiro (Cape Town), Matthew Schurch (Cape Town).

6. COMMENSAL

Patrick Woudt (Cape Town), **Rob Fender (Oxford)**, Richard Armstrong (Cape Town), Tim Staley (Southampton), Sergio Colafrancesco (Witwatersrand) + all PIs of MeerKAT Large Survey Projects

7. COMMISSIONING

Patrick Woudt (Cape Town), **Rob Fender (Oxford)**, Nadeem Oozeer (SKA SA) + all work group leaders



MeerLICHT structure

- Partners: UCT, Radboud, Oxford, SAAO, NWO
- Consortium Board
 - Members: PAW & PJG
 - Observers: RPF, VmcB, MAW
- Science Lead: Elmar
- Instrument Scientist: Retha
- Do we need subgroups as in ThunderKAT?
 - Science groups (Transients/Variables/etc.)
 - Software/Databasing/Machine Learning
 - Outreach/PR
 - Commissioning
- Additional partners? 'Natural' groups.



MeerLICHT / SKA-1

Taking the MeerLICHT/MeerKAT concept a step further:

- Larger aperture?
- Faster integration?
- Spread over the world? (Latitude/Longitude)
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