



# DARA: Advanced Training Opportunities

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# DARA PhD and MSc



- A new round of fully funded PhD/Masters places at UK universities will be announced shortly
- Starting from Oct 2017 onwards
- 5 x 3.5 year PhDs
- Or 4 x 3.5 year PhDs + 3 x 1 year MScs by Research ...
- SA co-supervisor
- SA secondment
- Home country visits



# DARA Big Data Phd & MSc



- ~ 7 MScs based in UK in radio astronomy
- ~ 5 PhDs based in SA in radio astronomy

Theme 1	Theme 2	Theme 3
<b>Data Analytics</b>	<b>Data Visualisation</b>	<b>Data Systems &amp; Tools</b>
Big Data Analytics are becoming key diagnostics and predictors in a wide range of fields including climate change, global health, education, and business intelligence. The data used across these fields is diverse and ranges from numerical measurement data from distributed networks to text data from social media. A key tenet of Big Data Analysis is that it is not only for post-facto analysis, but provides real time information and, more importantly, the use of predictive modelling, which is already used extensively in scientific analysis.	The size of image data sets being created by the SKA and its pathfinders means that traditional desktop visualization solutions will no longer be feasible. New approaches and technologies are required to allow visualization and visual analytics of remote big data. Moreover new modalities of data interaction are required that fuse data from multiple sources and wavelengths, and new tools for collaborative simultaneous visualization of the same big data by globally distributed research teams.	As part of this Newton program, the development of a cyber-infrastructure test bed will provide a working system for testing and prototyping technologies for software, services and data movement. This includes data science access and execution, the software systems and cyber infrastructure platforms that will knit the global network into a transparent cloud of research data, services and tools, and the data distribution technologies that allow the efficient movement of meta-data and analytics for data-intensive computation.

# DARA Mauritian MPhil



- 6 fully funded MPhil 2-3 year places in Mauritius starting ~Apr 2018
- Primary supervisor from University of Mascareignes and University of Mauritius
- Co-supervisor from UK and/or SA

# Jumping JIVE Placements

- Exchanges between EU and AVN countries for ~2-4 weeks
- 2-3 per year ASTRON placements for ~ 3 months



# Other PhD Funding Routes



- Individual university scholarships
  - Ask DARA members
- Commonwealth Scholarships Commission
  - Need to lobby for inclusion of radio astronomy as a national priority in each AVN country
  - Apply as an individual
  - Separate strand for certain nominated universities – many are in AVN countries
- Register in home country with co-supervision from UK/SA

# Summary



- There will be ~10 of UK-funded DARA advanced training places in the next year or so
- Not enough for the demand
- Highly competitive
- Do not rely on these
- Seek out other routes and lobby for additional funding