

MeerKAT open time call 3 December - Proposal summary

MeerKAT observations of Giant Radio Galaxies in the SDSS Stripe 82	
Proposal number 10	Thu Jan 31 2019 02:27:15 GMT+0200 (SAST)
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Abstract:

The aim of this proposal is to observe three GRGs and an additional X-shape radio source with the MeerKAT array. GRGs are an excellent target for MeerKAT, due to its sensitivity to objects with low surface brightness and its wide field of view. As MeerKAT has wide band receivers (900-1670 MHz), fluxes can be determined from a number of radio 'sub-bands' allowing the production of spectral index maps for each object. Spectral age modelling software such as the Broadband Radio Astronomy Tools (BRATS) package (Harwood et al. 2013) will be used to produce spectral age maps of the object's lobes, allowing us to place an estimate on the AGN duty cycle timescales of these 'restarted' systems. Understanding the AGN duty cycle is pivotal to our knowledge of AGN feedback, which has an important role in the evolution of galaxies. Additional constraints on the density of the ISM gas surrounding these systems can also be made.

Observation parameters:

Targets	GRG020545.93-005224.20: 31.44, -0.873. GRG225734.49-005231.96: 344.39, -0.875. GRG223114.32+010046.80: 337.81, 1.011. J011345.69+010516.19: 18.44, 1.088.		
Total time	16 in 1 epochs	Dump rate	8 s
Daytime	No preference	Variable/Transient	No
Baselines	N/A		

List of files uploaded. Files in order of upload. Usually just revising their proposal, so click the last one, but some people attached several different files, so they may all be useful.

<https://drive.google.com/open?id=1Hk4P93ePjhp6IT6cYqq6Yv0HvaZXLEX> .

File comments: