

MeerKAT open time call 3 December - Proposal summary

A High Sensitivity Full Polarization Study of Pictor A Radio Galaxy Using the MeerKAT	
Proposal number 39	Thu Jan 31 2019 13:33:34 GMT+0200 (SAST)
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Abstract:

We propose a high sensitivity full polarization observation of the strong radio galaxy Pictor A with the MeerKAT at L-band. The primary objectives are to detect the kpc-scale jet and the missing radio emission in the periphery of the central regions of the lobes, and to use these data as test-bed for commissioning of the polarization modes. We aim to make high fidelity images of the source and to study, for the first time, the kpc-scale jet in detail. Also, we aim to derive high sensitivity spectral index and rotation measure maps. Our goal is to determine the magnetic field strengths in the lobes and the jets, the jets' velocity, inclination, widths and age, and to study the properties of the foreground thermally-magnetized gas. Ultimately, we want to obtain a picture of the interplay between this source and its environment.

Observation parameters:

Targets	Pictor A, 05:19:49.723, -45:46:43.853		
Total time	11 in 1 epochs	Dump rate	8 s
Daytime	Nighttime preferred	Variable/Transient	No
Baselines	All baselines required.		

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=1M3F6Sjsfd3OMMfvndYZdlkb_ZjI5LKvp .

File comments: