

# MeerKAT open time call 3 December - Proposal summary

| GHz View of the TeV GRB 190114C |  |
|---------------------------------|--|
| <b>Proposal number</b> 34       | Thu Jan 31 2019 11:41:17 GMT+0200 (SAST)   |
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## Abstract:

Ever since the discovery of gamma-ray burst (GRB) afterglows, observations in the GHz regime have played a crucial role in understanding the physics of their ultra-relativistic outflows and determining the total energetics involved in these enigmatic phenomena. Combined with the current suite of observatories covering the entire electromagnetic spectrum, MeerKAT observations provide a crucial probe of GRB physics, their progenitors and surroundings. Here we request observing time to continue our follow-up campaign of GRB 190114C, a bright and relatively nearby GRB, and the first GRB with a detection of photons in the TeV regime. Given the latter, and the fact that MeerKAT has the lowest-frequency detections of this GRB, the follow-up campaign of this particular GRB spans a record-breaking 17 orders of magnitude in observing frequency.

## Observation parameters:

|                   |   |                           |                       |
|-------------------|---|---------------------------|-----------------------|
| <b>Targets</b>    | GRB190114C, 3h 38m 01.2s , -26d 56m 46.7s |                           |                       |
| <b>Total time</b> | 16 in 11 epochs                           | <b>Dump rate</b>          | 8 s                   |
| <b>Daytime</b>    | No preference                             | <b>Variable/Transient</b> | Variable or Transient |
| <b>Baselines</b>  | No constraints                            |                           |                       |

**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=1pcYla7Jje8V1v8ANWzOuJrUAlYWy35X1> .

## File comments: