



ANNOUNCEMENT OF OPPORTUNITY FOR OBSERVING TIME AT THE GRAN TELESCOPIO CANARIAS



(EMIR SCIENCE VERIFICATION)

Submission deadline: **12 December 2016**

GRANTECAN opens a call for **observing proposals for Science Verification of the newly commissioned EMIR near-infrared instrument on the 10.4-m Gran Telescopio Canarias (GTC)** for the GTC user community.

Applications have to be submitted via the IAC CAT on-line system at <http://www.iac.es/OOCC/night-cat/> where also instructions are provided. The **deadline for submission is 12 December 2016 at 23:59 local time in the Canary Islands**. Proposals that are approved by the panel will be asked to provide detailed observing information in "Phase 2" of the submission process. For a more extensive description of how the observing process at GTC is organized please refer to <http://www.gtc.iac.es/observing/>

1. EMIR instrument

Details of the EMIR instrument can be found at <http://www.gtc.iac.es/instruments/emir/emir.php>. **Observing modes currently offered are imaging and longslit spectroscopy**. The aim of this call for proposals is to test the instrument capabilities and observing strategies in these modes, and for this reason the following requirements are set:

- **The total amount of telescope time that can be requested in a proposal is 10 hours.** Considering the instrument overheads (see next section), this means that a maximum integration time of approximately 5 hours can be requested. We also remind the need to split the observations in Observing Blocks of 1 hour duration maximum.
- **Users will be asked to submit a detailed feedback on the output of the observations within six weeks from their execution.** To this end, a survey will be distributed by the GTC staff with the aim to collect any useful information to contribute to a full characterization of the instrument performance. This implies reducing and analyzing the data in a short time. Reduction tools for EMIR will be available at this stage to help users in the process.

2. Observing overheads

It is important to make realistic estimates of the observing overheads at the time of writing a proposal, as well as when completing the Phase-2 observing definition. As a guideline, for an EMIR an observation in imaging mode a total overhead of 10 minutes per observing block should be accounted for, while for longslit spectroscopy this total overhead increases to about 15 minutes, to account for the CSU configuration and acquisition process. In addition to the overheads for target acquisition and instrument/telescope setup, there are also overheads associated to the observing technique. **For typical science exposures, open-shutter efficiency for EMIR is about 50% (including dithering, readout overheads, etc.).**

To help users to estimate accurately the overheads associated with planned observations there is a Phase 2 simulator available at <http://gtc-phase2.gtc.iac.es/science/F2/>. We kindly recommend to use it while preparing proposals for this call to compute the total telescope time needed.

See <http://www.gtc.iac.es/observing/> for further details.

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