SPECIAL ANNOUNCEMENT OF OPPORTUNITY FOR OBSERVING TIME AT THE GRAN TELESCOPIO CANARIAS

SEMESTER 2015B: September 1st 2015 – February 29th, 2016

Submission deadline: ***3 August 2015***

GRANTECAN opens a **special call for observing proposals with CIRCE instrument** for Semester 2015B on the 10.4-m Gran Telescopio Canarias (GTC) for the GTC user community. This semester runs from September 1st 2015 until February 29th 2016. GTC time with CIRCE is **only open for queue-scheduled observing.**

All interested applicants must use the IAC's CAT on-line system for submitting their proposals. This can be found at http://www.iac.es/cat/pages/cat-nocturno/en/news/special-call-proposals-15b-at-the-gtc-with-circe.php?lang=ES where also instructions are provided. The **deadline for submission is 3 August 2015 at 5 pm local time in the Canary Islands**. Proposals that are approved by the respective time allocation committees will be asked to provide detailed observing information in the second phase 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. Available observing time

During semester 2015B scientific operation of the telescope will occupy the majority of the available observing time, but a very important fraction (some 25%) is expected to be required for ongoing telescope and instrument commissioning work that will preferentially be carried out during bright time. In particular, **there is an entire month stand down planned for September** to finish the works on the dome shutter (please take this into account when requesting time-critical observations along this period). The remaining 75% will be dedicated to programs that are granted time under this call, as well as guaranteed time for instrument builders and for the CCI International Time.

We note that the RA band from 10 to 14 hours is occupied by a few large, high-priority programs that have been granted time on the telescope. Hence the competition for time in these RA bands, in particular during dark/grey time and good seeing, will be fierce. Also, due to the stand down on September, extreme care must be taken when planning observations for targets with optimal observing dates during this month.

GTC will accept target-of-opportunity override proposals. GTC´s procedure for triggering target-of-opportunity observations can be found at http://www.gtc.iac.es/observing/too.php.

2. CIRCE instrument

CIRCE camera is a visitor instrument provided by the Universidad of Florida (UF) located in one of the Folded-Cass focus at GTC. The current available observing mode it offers include **imaging in the near-IR (JHKs bands), in a FOV of 3.4' x 3.4' with a 0.1"/pix plate scale.**

The instrument will be operated without acquisition and guiding unit (as the exposure times in the individual frames will be on the order of few seconds), and it will be externally supported by the UF team (P.I.: Stephen Eikenberry) with minimal participation of GRANTECAN staff.

For further details on the instrument's performance, users must get in contact with University of Florida (contact person, Stephen Eikenberry eiken@astro.ufl.edu) that will provide the required support. Relevant information can be also retrieved from the instrument web pages at http://www.gtc.iac.es/instruments/circe/circe.php.

Users must be aware the all the science publications based on the use of CIRCE will acknowledge both the University of Florida and GRANTECAN, and will include a citation to the CIRCE reference publication: *Garner et al. (2014), Proc. of SPIE Vol. 9147, 4*

3. Reserved objects

The science team of CIRCE obtains guaranteed observing time. The objects and observing modes planned for their observations on GTC are reserved for the exclusive use by the instrument science teams. Target lists of reserved objects may be found on the instrument web pages at http://www.gtc.iac.es/instruments/circe/circe.php#guaranteed-time

4. Telescope status

The GTC remains under development and various components and functions are already available but other still need to be developed and improved. Of particular interest for potential applicants for observing time we mention:

- The facility for fast guiding, to correct for high-frequency image movements due to atmospheric turbulence and possible vibrations of the telescope, is now operational.

- The main dome shutter that is still limited in its operation, which implies that the telescope beam is vignetted for elevations in excess of 80 degrees that does not allow observing near the zenith yet. Stand down planned for September would solve this problem definitively in S15B.

5. 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. In the case of CIRCE, in addition to the overheads for target acquisition and instrument and telescope setup, which are 10 minutes in the case of imaging, there are also overheads associated to the observing technique. For typical deep exposures, open-shutter efficiency for CIRCE is about 70% (including dithering, readout overheads, etc.).

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

6. Telescope Support Model

Observations with CIRCE will be carried out in *queue-scheduled service mode* by trained observatory personnel. Queue scheduling provides flexibility in optimizing the science return of the telescope depending on the atmospheric and technical circumstances each night. Priority is given to the scientifically most highly ranked proposal that is suitable for the observing conditions. In general, proposals with relaxed observing constraints will have a better chance of being completed

successfully. In classically scheduled observations, on the other hand, dates of observation are fixed and the risk of poor weather conditions and technical failures rests with the PI, but it provides the advantage of the PI being able to adapt the observing plan in real time.

For all observations, after the one-year proprietary period the raw data is copied to the GTC Public Science Archive, hosted at the Center for Astrobiology in Madrid (http://gtc.sdc.cab.inta-csic.es/gtc). PIs are also encouraged to contact archive staff at CAB to submit their reduced data once they have been published.

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