

# NORDIC OPTICAL TELESCOPE



## CALL FOR PROPOSALS

**PERIOD 61: APRIL 1, 2020 – OCTOBER 1, 2020**

The Nordic Optical Telescope (NOT) invites applications for observing time in Period 61, April 1, 2020 – October 1, 2020. The deadline for receipt of the applications is:

**Monday, November 18, 2019, at UT 12.00 noon**

### Important notice

As you may know, the NOT and its operations is being transferred to Aarhus University (AU), Denmark, and the University of Turku (UTU), Finland. The new organization for operating the telescope is a research collaboration between partners in the Nordic countries. The telescope will continue to operate in a way similar to how it has operated in the past and also the new organization will offer access to the telescope for astronomers in Denmark, Finland and Norway as well as astronomers from the University of Iceland and Stockholm University - the partners in the new organization. The Swedish Research Council will no longer fund operations of the NOT, and access to observing time will be limited for astronomers from Sweden. This does not apply to astronomers from Stockholm University.

As a new organization will be running NOT, it has been decided to request **all on-going Large proposal to (re-)submit a proposal at the coming deadline.**

AU and UTU will together with all other partners work on ensuring a smooth transition and we are looking forward to a successful continued operation of the NOT in many years to come.

### The applicants are reminded of the following:

- ◆ As maintained in the new organization, the share of observing time for applicants will be proportional to the contributions from the different Partners. ***Regular visitor mode observing is the basic mode provided to researchers affiliated with the Partner institutions, and does not require any user contribution.*** For any services requested beyond basic access, a contribution to the operational cost will be required. The detailed rules for the allocation of observing time and the related user contributions can be found at

<http://www.not.iac.es/observing/rules/ObservingTimeAndContributions.pdf>

- ◆ A system of Large Observing Proposals has been introduced, where researchers or research groups can apply for observing time for multi-semester programs. A separate proposal form has been prepared for Large proposals. The form can be downloaded together with the regular proposal form. The proposal submission is the same for both regular and Large proposals. The detailed rules applicable to these Large proposals can be found at

<http://www.not.iac.es/observing/largeproposals/LargeProposalsRules.pdf>

- ◆ Late applications are not accepted. However, proposals for short programmes ( $\leq 4$  hours) using fixed instrument set-ups are welcome at any time (see <http://www.not.iac.es/observing/service/>). ***The Fast-Track programme is a service that is provided free of cost to researchers affiliated with a Partner institution.*** It also incorporates a system to compensate regular observing programs for time lost due to interruptions by observations for ToO or Monitoring programmes.
- ◆ In order to spearhead the coordinated use of Europe's 2-4m telescopes, the Telescopio Nazionale Galileo (TNG) and NOT telescopes on La Palma have agreed to enter into a closer collaboration and will continue to jointly offer time at both telescopes to both communities in the next semester. See further details at <http://www.tng-not.iac.es/>. Accordingly, Nordic astronomers can submit normal observing proposals directly to the TNG, and vice versa, but prior coordination between similar proposals from the two communities is encouraged in order to optimise the scientific returns of the available observing time. However, in particular with respect to Target-of-Opportunity programs, the different rules applying to observing time at the TNG and the NOT will be taken in to consideration.

**In relation to the call for proposals at the TNG, the following:**

- We strongly encourage the submission of joint '*Italo-Nordic*' proposals using NOT, TNG, or both telescopes.

**NB:** *As for the allocation of observing time, user contributions, and travel support, the national rules applicable to the Principle Investigator of a proposal are followed.*

Applicants should carefully read the following instructions:

- 1: Proposals are reviewed without regard to the nationality of the applicant(s). Non-Nordic proposals should be submitted via the OPTICON programme if possible (see below), and the total time allocated to 'foreign' projects will be limited to  $\sim 15\%$  of the Nordic time. This limit does not apply to Italian projects submitted under the joint call described above.

Applicants will be informed of the outcome of their proposal as soon as possible after the evaluation by the NOT Observing Programmes Committee and preparation of the observing schedule by the Director. Brief explanatory notes are provided to proposers, especially for rejected proposals. Note also that only 75% of the science time can be scheduled by NOT; the rest is Spanish time (20%), or time allocated based on the agreement to operate the telescope at the ORM observatory (5%). Awards of observing time do not imply any financial support from NOT.

- 2: Proposals for projects of all sizes are welcome, large and small as well as medium-size. Pooling of related and synergistic proposals by consortia of groups with similar interests is encouraged.

Visitor mode observing is the basic mode provided. Programmes requiring service mode observing, or propose a Monitoring, Target-of-Opportunity (ToO) or similar project, should so indicate this in the proposal. In principle, compensation is provided in service mode for any observing time affected by Monitoring or ToO observations.

Applicants having particular, or complex scheduling requirements should contact the director ([director@not.iac.es](mailto:director@not.iac.es)) in advance in order to discuss optimum strategies.

- 3: The proposal submission procedure is electronic. The Latex template and style files for both regular and Large proposals **for Period 61** are available at the NOT web site: <http://www.not.iac.es/observing/proposals/>. Detailed instructions are provided in the template files themselves and in a README file; they should be followed carefully. Applicants should ***process and view the output of their files before submission*** in order to check that they process properly. Proposals using modified style files will not be accepted.

Proposals requesting more than one observing run in a period (using different instruments on a project counts as separate runs) should specify them individually in the proposal as indicated.

- 4: Regular and Large proposals should be submitted by e-mail before the above deadline to: [proposal@not.iac.es](mailto:proposal@not.iac.es), with the word "Proposal" both as Subject and as text. Automatic e-mail acknowledgement of receipt, with notification of any problems encountered in processing, is provided. Before the deadline, questions on proposal preparations or procedures may be sent to the same address with "Question" as the Subject.
- 5: Up-to-date information on instruments at NOT is found at <http://www.not.iac.es/instruments/>. Please note the following features for Period 61:
- To further improve the stability for radial-velocity measurements, the FIES grating has been mounted in a vacuum enclosure, making the spectrograph immune to the large wavelength shifts (of order km/s) caused by the changing pressure of Earth's atmosphere. This effect can be attenuated by bracketing science observations by calibration frames, but a much better approach is to completely remove the dependence on the changing atmospheric pressure by enclosing the grating in vacuum. In addition, a tunable Fabry–Pérot Etalon calibration unit (TFP) was installed, which will provide an ultra-precise calibration source used to set the velocity zero point of the instrument. The current approach using a Th-Ar lamp has several severe disadvantages (strongly non-uniform flux of emission lines and drifts in line positions). A TFP calibration source will alleviate these issues, providing further stabilization of the spectrograph. Tests are on-going to determine the stability that can be obtained, but it is expected to significantly improve on the  $\sim 2\text{-}4$  m/s on time-scales from a day to weeks that is currently reached.
  - We acquired two holographic diffusers to do high-precision photometry. These diffusers effectively scrambled the incoming light, providing a more constant and optimal ('top-head') shape, with minimal light loss, significantly reducing any systematic effects in the photometry. The diffusers provides a very stable stellar image with a width ( $\sim$ FWHM) of between 5 and 8 arcsec. See for more details <http://www.not.iac.es/instruments/alfosc/diffuser.html>.
  - The SOFIN high-resolution Echelle spectrograph is again available. It only is offered to do circular spectro-polarimetry with the medium-resolution ( $R\sim 80,000$ ) camera. SOFIN is not a common-user instrument: only limited support is provided.
- 6: The **OPTICON Trans-National Access Programme** provides access for external users to NOT and several other European telescopes with support from the European Union. **NB:** Proposals for OPTICON time are submitted and reviewed separately *two months before* the normal NOT proposals, and all eligible non-Nordic applicants should follow the OPTICON procedure. See <http://www.astro-opticon.org/h2020/tna/call/index.html> for the next deadline and all details on this programme.

October 23, 2019

T. Augusteijn  
Director, NOT