



European Organisation
for Astronomical
Research in the
Southern Hemisphere

Organisation Européenne
pour des Recherches
Astronomiques
dans l'Hémisphère Austral

Organización Europea
para la Investigación
Astronómica en
el Hemisferio Austral

Call for Ideas for Scientific Projects for the ESO New Technology Telescope (NTT) at the La Silla Observatory for the period 2016-2020

With this call for ideas ESO is opening new opportunities for large scientific projects at its New Technology Telescope (NTT) at the La Silla Observatory. To enable telescope access for innovative ideas, upgraded or new scientific instruments, up to 50% of the telescope time from 2016 to 2020 will be made available to selected projects in return for contributions to the NTT operation. Contributions can be in cash or in-kind through the provision of new scientific instruments of wider interest for the ESO community, upgrades to existing instrumentation, or operation support, a combination thereof, or equivalent.

For the first phase of the definition of these projects, ESO is requesting ideas for scientific projects to be sent to NTTcall2014@eso.org no later than

March 31, 2014.

The proposed ideas will be reviewed by ESO in consultation with its advisory committees and selected projects will be invited in a second phase to submit more detailed scientific – technical proposals. ESO expects to complete the selection process of successful projects by the end of year 2014. Work on the projects will start earliest in 2015 on ESO side.

A more thorough discussion of the context of the present call is given in Pasquini, Casali, & Russell (2013, *The Messenger* 154ⁱ).

La Silla Observatory

La Silla Observatory is a highly competitive astronomical site in the southern hemisphere providing unique scientific opportunities to its users either through ESO-operated telescopes and instrumentation or as infrastructure for scientific experiments and projects carried out by institutes from the ESO Member States. The ESO-operated NTT is one of the best 4-m telescopes in the Southern hemisphere and faces high over-subscription rates. The telescope is maintained to VLT technical standards and provides excellent image quality and efficiency at negligible technical down time.

NTT instrumentation

Current facility instruments operated by ESO at the two Nasmyth foci of the NTT are EFOSC2, a multi-mode spectro-imager in the visible domain commissioned in 1990; and SOFI, a near-IR spectro-imager put into operation in 1998. ESO currently supports the operation of Visitor Instruments that temporarily replace one of the facility instruments. Although currently not offered, SUSI2, the Superb-Seeing Imager installed in 1991 and upgraded in 1998 continues to be operational. More details on current NTT instrumentation are given in the [La Silla web pages](#)ⁱⁱ and technical information on the NTT is available in the [Interface Specification for Visitor Instruments](#)ⁱⁱⁱ document.

New instruments that are proposed in response to this call could replace either one or both existing facility instruments at the NTT. Modifications of the telescope can be proposed but have to consider the

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impact on the remaining facility instrument. No constraints are imposed on the potential new instruments, neither on their type nor on their availability to the ESO community. However, instruments of wider interest for the ESO community will be considered as in-kind contribution to the operation of the NTT. The proposed instruments have to fulfill at minimum the requirements for Visitor Instruments to ensure the operability and safety of the telescope.

Eligibility

This call for ideas is open to any interested party. All proposals received by the deadline will be reviewed in the first phase but preference will be given in the second phase to meritorious proposals from the ESO Member States including Brazil.

Contents of Response to this Call

The proposals for ideas in response to this call are expected to contain at least the following sections:

- 1) Abstract / executive summary
- 2) Scientific background
- 3) Description of the scientific proposal
- 4) Description of the technical proposal (if applicable)
- 5) Outline of the project plan
- 6) Estimate of the required resources from ESO
- 7) Estimate of the impact on the La Silla Observatory

The proposals should be contained in a total of 10 pages of A4 size. No Annexes are allowed.

Questions relating to this Call

For any questions concerning this call as well as any request for documentation referred to in this document, please contact NTTcall2014@eso.org.

i <http://www.eso.org/sci/publications/messenger/archive/no.154-dec13/messenger-no154-2-6.pdf>

ii <http://www.eso.org/sci/facilities/lasilla/instruments.html>

iii <http://www.eso.org/sci/facilities/lasilla/instruments/visitor/VisitorFocus.pdf>