

# Call for Proposals: LBT LUCIFER Science Demonstration Time

Dear Colleagues,

We are pleased to announce a special call for proposals for Science Demonstration Time (SDT) with the Lucifer 1 instrument on the LBT.

LUCIFER 1 and 2 are a pair of near-infrared multi-mode instruments for the Large Binocular Telescope developed as a collaboration of five German institutions, led by the Landessternwarte (LSW) in Heidelberg. In seeing-limited mode, each will have a 4 arcminute square field of view and will be capable of longslit and multi-slit spectroscopy, as well as imaging in the near infrared zJHK bands from 0.9 to 2.4 microns. LUCIFER1 was installed on the SX (left) telescope in early September 2008, followed by on-sky commissioning runs in seeing-limited mode.

After LUCIFER passed a series of efficiency tests in the September commissioning run, the LBT Board has decided to make available to the LBT community a total of 12 nights for the LUCIFER 1 Science Demonstration Time (SDT), scheduled for **Dec 5 - 16, 2009**.

The SDT will provide the LBT community a first opportunity to exercise LUCIFER under different observing modes and scientific applications. **SDT will only be offered in seeing-limited imaging and longslit spectroscopy mode.** The SDT observations will be carried out in service mode by the LBTO and a group of partner observers, with support from the LUCIFER commissioning team. All SDT data will be accessible to the entire LBT community simultaneously, as soon as the data are taken and transmitted to the LBT archive, in a fashion similar to the LBC.

**SDT proposals should be sent to each partner TAC/coordinator with the following deadline:**

AZ	Nov 5	TAC ( <a href="mailto:tacprops@as.arizona.edu">tacprops@as.arizona.edu</a> )
INAF	Nov 10	SDT Coordination Panel ( <a href="mailto:lbt_sdt@inaf.it">lbt_sdt@inaf.it</a> )
LBTB	Nov 10	Roland Gredel ( <a href="mailto:gredel@mpia.de">gredel@mpia.de</a> )
OSU / RC:	Nov 10	Paul Martini ( <a href="mailto:martini@astronomy.ohio-state.edu">martini@astronomy.ohio-state.edu</a> )

Each partner will evaluate and forward a ranked list of approved programs with a total on-sky integration time of approximately 15 hours. The approved program lists from the partners are due Nov 20. An SDT Coordination committee consisting of the LUCIFER commissioning team lead and the SDT coordinators will review all proposals, in order to identify and resolve any overlapping proposals and maximize the scientific output of these first observations. The SDT queue will be populated and executed based on the total LBT share of each partner. The final approved SDT program list will be posted by **Nov 25** at the link below. The proposal style file and template are attached to this Call.

We have established a webpage outlining the observing modes and capabilities available for the SDT observations. It also includes a link to a preliminary exposure time calculator. The webpage is:

<http://abell.as.arizona.edu/~lbtsci/Instruments/LUCIFER/lucifer.html>.

In order to help proposal preparation, this website will be updated with improved ETC and sample data from commissioning, when they become available

Please note the following when preparing your proposals:

- SDT is in imaging and longslit spectroscopy modes only.
- Please in your proposal, list the total amount of **on-sky integration time**, as well as fill in the target list form, giving the positions, modes, and integration times of each field. Due to uncertainties in overhead at this stage, we will apply an overhead rate when evaluating proposals.
- Because of the short duration of the SDT, we will only consider proposals with total on-sky integration time less than 10 hours.
- During the SDT, we will not support non-sidereal tracking and target-of-opportunity observations.
- Cross-partner collaborative proposals are strongly encouraged. Unless explicitly requested otherwise, we will charge each involved partner equally for these programs.
- Please do not include standard calibration observations (photometric, spectroscopic or telluric standards, flat fields etc) in the calculation of your request. These will be taken by the SDT team as part of the standard nightly procedure. If, however, special calibration is needed, please describe it in your proposal.

We look forward to receiving your proposal!

LBT Scientific and Technical Committee and LUCIFER Instrument Team