

NORDIC OPTICAL TELESCOPE

Office of the Director



Johannes Andersen

The Niels Bohr Institute
Astronomy Group
Juliane Maries Vej 30
DK - 2100 Copenhagen Ø
Denmark

Tel: +45 353 25934

Fax: +45 353 25989

E-mail: ja@astro.ku.dk

Call for *Letters of Interest* to propose new front-line instrumentation for the Nordic Optical Telescope (NOT)

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Background

Developments and discussions in recent years have made it plain that the role of the Nordic Optical Telescope (NOT) in the future is not as a standalone general-purpose facility, but as a specialised instrument that will

1. Serve the Nordic community as a uniquely efficient tool for their highest-priority scientific projects in the northern hemisphere; and
2. Make sure that NOT will be competitive in an important niche when the European mid-size telescopes will become elements in an overall optimised European facility.

The strategy discussions conducted by the NOT user community in the autumn of 2006 led to the formulation of an agreed policy by which NOT should aim to be the most efficient northern telescope offering simultaneous optical/NIR imaging and low-resolution spectroscopy, optimised for transient and other variable sources (with standby high-resolution spectroscopy for brighter sources as well). The final meeting of this strategy initiative also concluded that new instruments for NOT should be approached very differently from the loosely-organised “best effort – no risk” model that has been used in the past and occasionally resulted in fatal delays.

To quote the final report (See <http://www.not.iac.es/news/reports>):

“In all cases, projects for new instrumentation should be implemented following a Call for Proposals. The proposing teams must present a compelling science case, backed by a proven track record, and demonstrate the efficiency and feasibility of the chosen approach as well as a commitment to provide the necessary scientific and technical skills, manpower, and funding to complete the project in a timely manner. The necessary calibration devices, calibration plans, and pipeline reduction software should be included, so the data can enter seamlessly into the future Virtual Observatory. Guaranteed observing time should be awarded in return for these contributions; failure to meet agreed targets should result in loss of that reward and/or in the cancellation of the project.”

With this letter, we invite individuals, research groups, and consortia to submit *Letters of Interest* to provide new instrumentation for NOT, following the above model. All ideas for powerful and innovative instruments for NOT are welcome, a “LuckyCam”- type high-resolution, fast-readout imager or a spectropolarimetric option for FIES, allowing the determination of stellar magnetic fields, being examples that have been discussed already. Suggestions and plans for the most effective complement of (spectro)polarimetric observing options for NOT in general would also be of great interest. Finally, our main long-term priority is an efficient standby optical imager and low-resolution spectrometer, leaving the near-IR camera NOTCam mounted permanently at the main focus and preferably with an option for (spectro)polarimetry as well.

We emphasize that no detailed designs or feasibility studies – let alone fully designed and funded projects – are expected at this stage, merely indications of a serious interest in contributing to the future competitive equipment of NOT. After the *Letters of Interest* have been received, they will be reviewed by the NOT STC, and discussions will be taken up with the proposers to define a programme that can be realistically pursued.

Accordingly, *Letters of Interest* should be no more than 2-3 pages. They should identify the proposing group and the person in charge of the proposal, and briefly address some or all of the following points:

- The science case for the instrument and a conceptual design compatible with NOT;
- An outline plan and schedule for the design, construction, and commissioning of the instrument;
- An outline of any technical or planning contributions expected from NOTSA itself;
- An outline budget and a plan for how to refine the budget and secure funding;
- An estimate of the projected use of the instruments (nights/year), including the foreseen use by the proposing group in open as well as guaranteed observing time.

The *Letters of Interest* should be sent to the NOT Director at the address given in the letterhead, *if possible by **May 15, 2007.***

We re-emphasize that no major effort is expected before we have identified the interested parties and have discussed the further steps with them. Questions and requests for detailed documentation are welcome at any stage and should be addressed to the NOT Director or to the Astronomer-in-Charge, Dr. Thomas Augusteijn (tau@not.iac.es).

Looking forward to hear from you, and with best regards,

Johannes Andersen
Director, NOTSA