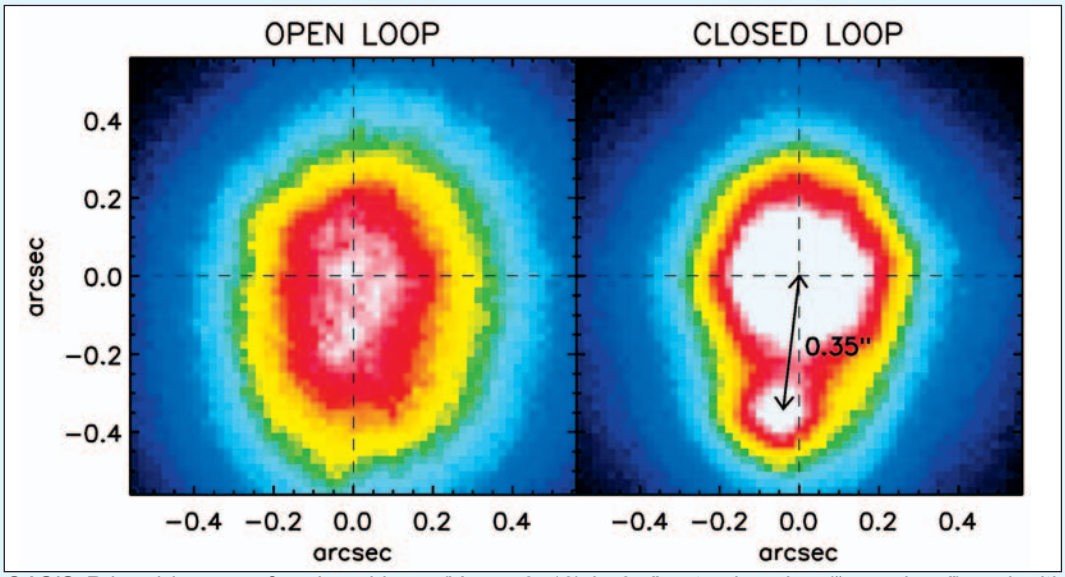
No. 8, September 2004

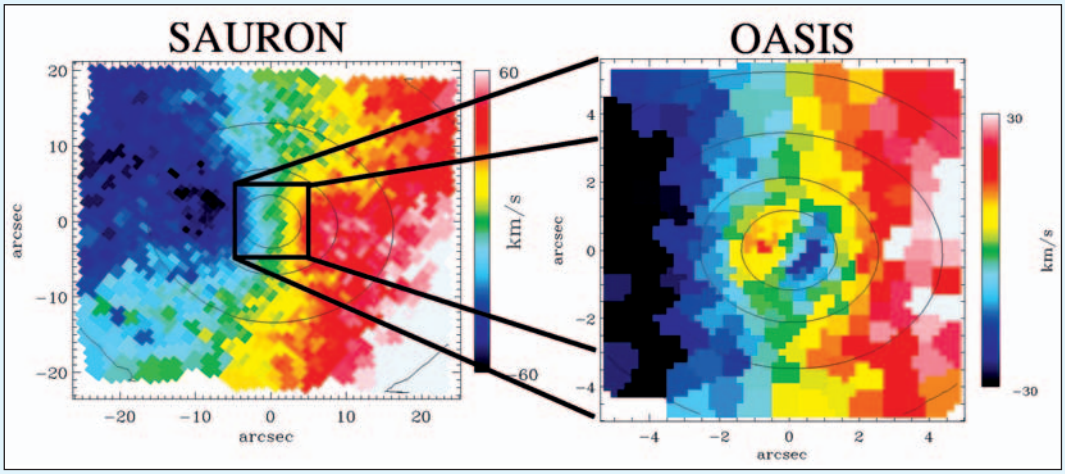
THE ISAAC NEWTON GROUP OF TELESCOPES

NEWSLETTER

Science Prospects with OASIS



OASIS R-band images of a close binary (V_{mag}~ 9+10) in 0.5" natural seeing ("open loop") and with NAOMI correcting the PSF ("closed loop") to 0.2" FWHM.



*Spatially binned SAURON (left map) velocity field of NGC 4382 (Emsellem, E., et al., 2004, MNRAS, **352**, 721) showing the outline of the OASIS field (right map) as obtained at CHFT (see article by Richard McDermid et al. on page 3).*

Message from the Director

Dear Reader,

In some aspects the last several months at the observatory, since the previous issue of this Newsletter, have been similar to previous years, and in other aspects there has been major change. To start with the latter, I refer to the very welcome news that the long-sought development of a laser beacon for adaptive optics at the William Herschel Telescope has been approved. Coincidentally, receiving 'green-light' for the project will take on a literal meaning when some two years from now the projection of green laser light will become a regular feature above the telescope. The scientific potential of having the full sky available to adaptive optics exploitation rather than only about 1% as in the case of 'classical' adaptive optics, is excellent. Now it is our task to build a working system, and then to scientifically exploit it. An introductory

THE ISAAC NEWTON GROUP OF TELESCOPES

The Isaac Newton Group of Telescopes (ING) consists of the 4.2 m William Herschel Telescope (WHT), the 2.5 m Isaac Newton Telescope (INT) and the 1.0 m Jacobus Kapteyn Telescope (JKT), and is located 2350 m above sea level at the Roque de Los Muchachos Observatory on the island of La Palma, Canary Islands, Spain. The WHT is the largest telescope of its kind in Western Europe.

The construction, operation, and development of the ING Telescopes is the result of a collaboration between the United Kingdom and the Netherlands. The site is provided by Spain, and in return Spanish astronomers receive 20 per cent of the observing time on the telescopes. The operation of the site is overseen by an International Scientific Committee, or Comité Científico Internacional (CCI).

A further 75 per cent of the observing time is shared by the United Kingdom, the Netherlands and the Instituto de Astrofísica de Canarias (IAC). The remaining 5 per cent is reserved for large scientific projects to promote international collaboration between institutions of the CCI member countries.

The ING operates the telescopes on behalf of the Particle Physics and Astronomy Research Council (PPARC) of the United Kingdom, the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) of the Netherlands and the IAC in Spain. The Roque de Los Muchachos Observatory, which is the principal European Northern hemisphere observatory, is operated by the IAC.

(Continued from front cover)

article on this exciting new project can be found on the following pages. I would very much welcome ideas and suggestions from the user community towards this project.

Coming back to the first sentence of this introduction, activities at the observatory have been as intense as ever. The last several months have once again seen a range of visiting instruments. Three of them were first-time visitors, each with their own very significant technical and astronomical challenges. There was CIRPASS, the near IR spectrograph from Cambridge operating in multi-object mode. There was PLANETPOL from Hertfordshire, measuring polarisation with remarkable acuracy in an attempt to detect planets around stars. And there was S-CAM2, deploying the second-generation of super-conducting tunnel junction detector technology for a range of science programmes. So yes, work at ING has gone on as normal and hasn't been boring for a single moment.

Enjoy this issue of the Newsletter, and note that the editorial team would love to receive contributions from our readers!

René G. M. Rutten

The ING Board

The ING Board oversees the operation, maintenance and development of the Isaac Newton Group of Telescopes, and fosters collaboration between the international partners. It approves annual budgets and determines the arrangements for the allocation of observing time on the telescopes. ING Board members are:

Prof J. Drew, *Chairperson* – ICL
Prof T. van der Hulst, *Vice Chairperson* – University of Groningen
Dr P. Crowther – University of Sheffield
Dr G. Dalton – University of Oxford
Dr R. García López – IAC
Dr R. Stark – NWO
Dr C. Vincent – PPARC
Ms Deborah Telfer, *Secretary* – PPARC

The ING Director's Advisory Group

The Director's Advisory Group (DAG) assists the observatory in defining the strategic direction for operation and development of the telescopes. It also provides an international perspective and act as an independent contact point for the community to present its ideas. DAG members are:

Dr M. McCaughrean, *Chairperson* – Astrophysikalisches Institut Potsdam
Dr M. Balcells – IAC
Dr P. A. James – Liverpool John Moores Univ.
Dr N. Tanvir – Univ. of Hertfordshire
Dr E. Tolstoy – Univ. of Groningen

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The ING Newsletter is published twice a year in March and September. If you wish to submit a contribution, please contact Javier Méndez (jma@ing.iac.es). Submission deadlines are 15 July and 15 January.