

## OTHER NEWS FROM ING

# An RAS Specialist Meeting, London, 14 October 2005: “Science from La Palma — Looking Beyond 2009”

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As discussed in the Director's opening message, the ING is reaching an important point in its history. In 2009 the international agreement setting up the Roque de los Muchachos Observatory on the island of La Palma will have been in existence for a period of 30 years. In 2007 the United Kingdom will have to make a decision on whether or not to withdraw from that agreement and PPARC, through its ownership of the Isaac Newton Group of Telescopes, has the responsibility of deciding on the UK's involvement in the observatory beyond 2009. As part of the decision making process, and in support of the UK's overall strategic re-evaluation in astronomy, the ING was reviewed during 2005. It was therefore thought timely to assess recent scientific achievements from the Roque de los Muchachos, and to consider what role the observatory might have beyond 2009. Under the auspices of the Royal Astronomical Society a Specialist Meeting was held in Burlington House, Piccadilly, London on October 14th 2005 and was attended by approximately 100 astronomers from around the UK. The meeting was structured to allow two morning sessions of science talks with contributors from various fields in astronomy, followed in the afternoon by a series of strategy talks, culminating in a half-hour discussion on the future of the ING.

The morning session, chaired by Gavin Dalton (Oxford Univ.), was opened by Danny Lennon (ING) who welcomed the participants and summarised the motivation for the meeting. This was quickly followed by Peter Meikle (Imperial College) with an excellent contribution on supernova studies showing how telescopes of different aperture sizes can all contribute effectively to this field of research. Some highlights included recent results on the search for supernovae in the nuclei of starburst galaxies, and on the physics of type Ia supernovae. Mike Irwin (IoA) then reviewed the achievements of the INT in the area wide field surveys, paying particular attention to the impressive results in recent years on such topics as satellites and tidal tails in the Local Group. Jim Hough (Hertfordshire Univ.) emphasised how the low intrinsic telescope polarisation of the WHT makes it the ideal platform for his visitor instrument PLANETPOL, used in pursuit of the direct detection of the atmospheres of extrasolar planets. Tom Marsh (Warwick Univ.) brought us up to the coffee break with a review of his work using the INT and WHT to search for double degenerates, concentrating as well on the



Lecture theatre of the Geological Society at Burlington House, Piccadilly, London.

important contribution the WHT is making to Supernova Progenitor Survey in following up and characterising double degenerate systems.

Don Pollacco (QUB) chaired the post-coffee session which opened with a presentation by Mark Wilkinson (IoA) on observations of stars in Local Group dwarf spheroidal galaxies using the ING's AF2/WYFFOS instrument on the WHT, showing how their kinematics are excellent probes of dark matter properties on various scales. This was followed by two complementary contributions by Mike Merrifield (Nottingham Univ.) and Tim de Zeeuw (Leiden Univ.) on the visiting instruments, the Planetary Nebula Spectrograph (PNS) and the integral field spectrograph SAURON respectively. We saw how PNS has been used to investigate the dynamics of PNe and dark matter in the distant haloes of galaxies while SAURON has focused on the inner regions of galaxies, with additional fine scale in the nuclear regions being revealed with the ING's adaptive optics assisted integral field spectrograph OASIS. Both talks painted a very bright picture for the future of these instruments at ING. Rob Jeffries (Keele Univ.) then discussed results from the ING on binary systems among low mass stars and brown dwarfs, highlighting the high fraction of short-period binary systems found in the Sigma Orionis cluster. Vik Dhillon (Sheffield Univ.) closed the morning session with an overview of the science produced with another visitor to the WHT, the high-speed triple-beam CCD camera Ultracam, now being used to exploit the time domain in astronomy.

The afternoon strategy session, chaired by Tim de Zeeuw (Leiden Univ.), kicked off with an invited contribution from Rafael Rebolo (IAC) concerning the status and capabilities of Grantecan, Spain's 10m telescope on La Palma. Rafael emphasised the complementarity of the ING telescopes with Grantecan and Spain's very strong interest in seeing the telescopes continue beyond the 2009 watershed. This was followed by a review of the ING's current

instrumentation suite and development plans by René Rutten (Director, ING). This included an overview of the Adaptive Optics and laser guide star project (GLAS) due for completion in 2006, and also introduced the idea of possible joint operations of all the night-time telescopes by a common organisation, a Common Northern Observatory (CNO), which might well be a viable path for the future. Bruno Leibundgut (ESO, ING Visiting Committee member) then gave a summary of the findings of the ING Visiting Committee, highlighting for example the strategic importance of the ING as a platform for innovative instrumentation leading campaign-style programs, its northern hemisphere location and the excellence of the site, its lead in adaptive optics, and the potential for support of space astronomy. Thijs van der Hulst (Groningen, Chairman of ING Board) re-iterated much of this in his presentation of the ING Board's view of ING beyond 2009, stating that in the Board's opinion it is vital to continue ING into the next decade and pointed out importance of getting a commitment from all three parties (PPARC, NWO and IAC) to a common policy. The meeting finished with an open discussion, chaired by Janet Drew (Imperial College), during which there was a lively discussion of the CNO idea (Johannes Andersen, NOT Director). Gerry Gilmore (IoA) emphasised that the future scientific direction of the telescopes needs to be addressed as well as these organisational issues. It was also pointed out that an important aspect of ING operations is the significant degree of hands-on participation by young astronomers in science projects. The flexibility of the ING to allow various visitor instruments access to the WHT was also praised and valued. The discussion finished with a statement by Roger Davies (Oxford Univ.) promising to bring the flavour of the meeting to the attention of PPARC's Science Committee. ☐

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