# TELESCOPE TIME

# **Applying for Time**

Danny Lennon (Head of Astronomy, ING)

or instrumentation and detector combinations on offer please refer to

http://www.ing.iac.es/INGinfo

or PPARC's PATT newsletter which is issued electronically about one month before semester deadlines. Applications should be submitted by email only, by the appropriate deadline, to ingpatt@ing.iac.es. Application forms and style files may be obtained from the ING web pages.

### What's New

### Detectors

The ING's new data acquisition system, Ultradas, was successfully tested on the IDS/INT using an EEV 4k×2k CCD. This is encouraging since, in semester 1999B, there are plans to commission the Ultradas system on IDS and the WFC on the INT. Also in this semester, the 2-chip CCD camera will be commissioned, with Ultradas, at prime focus on the WHT and on UES. Ultradas will produce a marked improvement in readout speed and data quality. Another recent improvement in the detector area has been the commissioning of a second 2k×2k SITe detector. This is currently undergoing testing on the JKT (see page 22), and this will either stay at the JKT or become the ISIS red arm detector. The ING has also been actively pursuing the purchase of new red sensitive chips like the MIT/LL devices and a decision is imminent. These devices will be especially useful as replacements for the suite of TEK/SITe detectors currently in use, for example, on the red arm of ISIS. This step is

necessary since the EEV 4k×2k devices, while providing excellent blue performance, suffer from severe fringing in the red which is particularly damaging to spectroscopy.

#### **Instruments**

As mentioned above, the two-chip CCD camera will be commissioned at prime focus on the WHT in 1999B, this camera will contain two EEV 4k×2k CCDs covering a field of approximately 16×16 arcminutes. A major event is that INGRID, the WHT's long-awaited replacement for WHIRCAM, is due to be commissioned towards the end of 1999B. Further details of INGRID can be found in Chris Packham's article in this issue. Also in this issue is a report on the recent commissioning run of ELECTRA, the prototype AO system and fore-runner of the ING's common user AO system which is due to be delivered to the ING in 2000A.

### **Other News**

The Half-Arcsecond Program (HAP) has recently completed an important study of seeing at the La Palma site and at the WHT, a paper summarising the findings is currently in press with MNRAS (Wilson, O'Mahoney, Packham & Azzaro). Briefly, this study demonstrates that the intrinsic seeing at the site is comparable to that at Paranal and Mauna Kea with a median value of 0.69 arcseconds. Furthermore, the image quality and tracking of the WHT are such that they do not significantly degrade the intrinsic site seeing, in other words dome/mirror seeing at the WHT is now not a significant problem. Note that there are significant seasonal variations which observers should be aware of, the summer months being

significantly better that the winter months. More complete details of HAP can be found at: http://www.ing.iac.es/hap/ haphomepage.htm and in the MNRAS preprint, a copy of which may be requested from Chris Packham (cp@ing.iac.es). The emphasis of the HAP has now been switched from the WHT to the INT where it is clear that the seeing obtained at the telescope is consistently and significantly worse than the intrinsic seeing. In fact the Wide Field Survey is assisting in providing important quantitative information on this problem. Clearly, if we can obtain sub-arcsecond seeing at the INT on a regular basis this would be of enormous benefit to WFC science in particular. The HAP is therefore attempting to identify potential contributors to this problem and to quantify their contributions to the net degradation of seeing.

## Telescope Operator Availability

Due to the reduction in the number of Telescope Operators (TO) working at the ING, it has been ING policy over the past two semesters to offer TO support on the first 2 nights and the last night of Wide Field Camera runs on the INT. This particular instrument/telescope combination was targetted because of the ease with which it is possible to operate the combined systems by a single person. This scheme has proved to be successful, there has been no significant increase in down-time due to the absence of a TO, however the workload on the TO group is still very high with little scope to cover eventualities such as absence due to illness or training. In semester 2000A we are therefore withdrawing TO support on the last night of WFC runs. Observers who feel uncomfortable with the work-load that this implies, paticularly at the beginning and end of each night, should consider applying for PATT funding of an additional observer.

This measure will only improve the situation for the TO group in a small

way. In the longer term we will work towards improving the observing system for IDS such that it is possible to operate IDS and the INT in a manner similar to the WFC/INT combination so that we can reduce TO support on these observing runs. This is one measure we are taking to ensure that the operating cost of the INT is reduced, thus strengthening its prospects for a productive future in the long-term.

### JKT Support

The JKT has been a single user telescope for some time, with an introduction on the first night being provided by a Support Astronomer. In semester 2000A we propose to discontinue night-time support by a PhD level astronomer. We will examine and test two alternatives:

- 1) A day-time introduction being provided by the SA on the afternoon before the observing run begins, with the observer made responsible for being present the previous night to acquire some on-sky instruction from the previous observer.
- A night-time introduction is provided by students rather than a PhD level SA.

As the JKT is a single user telescope with no TO support whatsoever, users should be aware of the ING's standing policy that visiting observers should be experienced observers. Occasionally we have had JKT observers with little or no previous observing experience. This was unsatisfactory in the past and will clearly be extremely risky under either of these new schemes.

### Scheduling Restrictions

For operational reasons, restrictions have been set on the number and types of instrument changes which the ING supports. Applicants should be aware of this since there may well be instances when a well regarded program does not get time due to scheduling constraints.

If for good scientific reason the TAGs or the LPCC consider the guidelines too restrictive, exceptions can be negotiated with the Director of ING on a case-by-case basis. Likewise, the Director of ING may have to restrict the scheduling of instruments beyond what has been agreed in this document for reasons of engineering work, shortage of key staff, etcetera. The Director of ING will inform the TAGs on any additional constraints before the scheduling meetings take place.

Apart from the guidelines stated here, there are additional scheduling constraints to minimize the operational cost and risk which have to be taken into account (e.g. no instrument changes during weekends and public holidays, and no more than one instrument change per day).

Negotiations with the Director of ING should be channelled through the ING scheduler or the Head of Astronomy. If agreement can not be reached the authority of the ING Board may be called upon for arbitration.

#### William Herschel Telescope

- A maximum of 12 instrument changes per semester is accepted.
- A maximum of 3 separate observing periods with 'expert' instruments (AUTOFIB, LDSS, and TAURUS) per semester is accepted. (Each observing period may contain various observing programmes.)
- No limit to the duration of an observing programme is set.
- All scheduled observations will be carried out by the applicants or associated scientists, unless explicitly agreed otherwise with the Head of Astronomy or the Director of ING.

### Isaac Newton Telescope

- A maximum of 12 instrument changes per semester is accepted.
- Observing time is allocated in blocks of one week on average.
- No observing programmes shorter than 4 nights are accepted, unless explicitly agreed by the Head of Astronomy or the Director of ING.
- A maximum grand total of 27 observing runs per semester are

accepted. This grand total applies to the total of PATT (including Eire and Porto), NL TAG, CAT, survey programmes, and International Time. Service and discretionary nights, and queue observing nights are not counted in this grand total.

 All scheduled observations will be carried out by the applicants or associated scientists, unless explicitly agreed otherwise with the Head of Astronomy or the Director of ING.

### Jacobus Kapteyn Telescope

- The JKT only supports one common-user instrument, and hence private instruments are not accepted on this telescope.
- Observing time is allocated in blocks of one week.
- No observing programmes shorter than 5 nights are accepted.
- A maximum grand total of 27 observing runs per semester are accepted. This grand total applies to the total of PATT (including Eire and Porto), NL TAG, CAT, and International Time. Service and discretionary nights, and short observations taking up to only one night are excluded from the grand total.
- All scheduled observations will be carried out by the applicants or associated scientists, unless explicitly agreed otherwise with the Head of Astronomy or the Director of ING.  $\square$

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# **Important Dates**

Deadlines for submitting applications

PATT and CAT: 31 March, 30 September ITP: 30 June

Semesters

Semester A: 1 February - 31 July Semester B: 1 August - 30 January