

Who wants to use the JKT?

The Jacobus Kapteyn telescope on La Palma will be more widely available this year. Rene Kuiten seeks expressions of interest.



The Jacobus Kapteyn Telescope: excellent facilities available to the community.

The 1 m Jacobus Kapteyn Telescope at the world-class observatory site Roque de los Muchachos on the island of La Palma, Spain, will be taken out of service as a common-user facility as of August 2003. Instead, the telescope may be offered for use to paying customers. This announcement calls for expressions of interest from potentially interested parties. Expressions of interest should be sent, preferably by email, to the address below, to arrive before 5 September. You will receive an

acknowledgement of receipt. Your statement should include an indication of how you expect to use the telescope (i.e. for a specific long-term scientific programme, as part of a consortium, student training etc) and how you expect to acquire funding. Note that at this stage no firm commitments are requested. Further enquiries can be directed to the same address: Dr R G M Kuiten, Isaac Newton Group of Telescopes, Apartado de Corros 321, E-38700 Santa Cruz de la Palma, Spain; rgmr@ing.iac.es.

Eta Carinae shows "model" behaviour

Julian M Pittard reports on the ups and downs of a stellar survivor – which suggests that it is, in fact, two stars.

Eta Carinae is a massive star that survived the greatest non-terminal stellar explosion known. But it has been suggested (see Pittard, A&G 2003 44 1.17-22) that the star is actually a member of a binary system. X-ray monitoring of Eta Carinae, led by Dr Michael Corcoran at NASA's Goddard Space Flight Center, has recently confirmed the expected sudden sharp drop in flux in the 2-10 keV energy band. The timing of the decline agrees well with predictions based on a 5.52 yr orbital period. In this scenario, another massive star orbits Eta Carinae and their hyper-sonic stellar winds collide violently to produce plasma at more than 100 million K. This radiates mainly at X-ray energies, and the observed flux depends on the separation of the stars and their orientation. The X-ray lightcurve (http://www.gsfc.nasa.gov/users/corcoran/eta-car/eta-car_xrte_lightcurve/) is broadly consistent with the hypothesis, highly eccentric orbit, where the separation varies from about 30 AU to about 1.5-3 AU. It is around the time of closest approach that the X-ray flux drops precipitously. Detailed analysis of X-ray spectra should reveal whether the companion star causes Eta Carinae to eject extra mass at this time.

RAS thesis prizewinners



The RAS is happy to announce the winners of the 2002 RAS Michael Penston and Blackwell Prizes and to present the winners with their prizes at the meeting in May this year. Ms Sue Corbett, journals director of Blackwell Publishing, presented Dr Emma Bunce with the 2002 RAS Blackwell Prize. Prof. Ian Halliday, Director of PPARC, presented Dr Mark Wright with the 2002 RAS Michael Penston Astronomy Prize. The picture shows, from left to right, Ian Halliday, Mark Wright, Emma Bunce and Sue Corbett. The RAS Michael Penston and Blackwell Prizes are awarded for the best PhD thesis in astronomy and astrophysics, and geophysics and planetary science, respectively. Supervisors (who are Fellows of the RAS) are responsible for entering theses in the competition; details can be found at www.ras.org.uk/html/ras_medals.html.

Work, rest and play

This issue of A&G is unusual in that it carries a set of papers around just one theme: Mars. In part this reflects the close approach of the planet to Earth, celebrated in National Astronomy Week, which means that the planets will be especially visible, to both astronomers at work and those who watch the skies at rest, or at play. The close approach also means a flurry of missions to the Red Planet, taking advantage of the conjunction. Among them will be Beagle 2, a British-led lander, aboard Mars Express, the first European spacecraft to head for Mars. But the work reported in this issue also reflects the success of recent NASA missions such as Pathfinder, Mars Global Surveyor and Mars Odyssey, which have provided a wealth of high-quality data and a consequent renaissance in planetary science.

The papers collected here do not say all there is to be said about research on Mars, but they show the scope and quality of current work. Much of the current interest in Mars stems from the possibility of finding traces of life there; either extant or in the past; it is almost as exciting to think that the planet might still be geologically active. When the current spacecraft arrive safely at Mars, we have every chance of finding out. Watch this space!

Sue Bowler, Editor

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