

RESEARCHER DEVELOPMENT AND TRANSFERABLE SKILLS TRAINING FUNDS

Funding request for PhD student training at SAAO

Proposal on behalf of: Daniel Evans & Samuel Gill, Astrophysics group.

13 September 2016

Background

The Astrophysics group has been successful in applying for time to use the 1.0-m telescope at the South African Astronomical Observatory (SAAO). Time has been awarded in two blocks, 5-18 Oct and 30 Oct -12 Nov. This telescope is ideal for obtaining observations that maximise the scientific output from the WASP project. These observing runs are also a fantastic opportunity for us to receive training in several career-related and transferable skills. Dr John Southworth will accompany Samuel Gill for the first week of the first observing block and Dr David Anderson will accompany Daniel Evans for the first week of the second observing block. The telescope runs will be used to collect data for a few different projects, including follow-up of WASP planets that are the subject of Daniel Evan's PhD work, and to obtain data on very low mass stars in binary systems for Sam Gill's PhD. Here we are requesting matched-funding from the faculty to cover 50% of the cost of this training. For Sam Gill, the other 50% of the costs will come from the Research Training and Support Grant (RTSG) element of his PhD studentships. For Daniel Evans the remaining 50% can be covered by Dr Southworth's Leverhulme Trust funding, although his RTSG may be used for funding if this does not prove to be sufficient. The RTSG has to cover all research training costs such as training workshops and, perhaps most importantly, to attend international conferences during our final year where we can present our work to an international audience and meet potential post-doc employers. These international conferences are becoming increasingly expensive, and so we are requesting matched-funding from the Faculty. We have consulted with our supervisors and Kelly Montana-Williams to confirm that there are no other sources of funding available from current grants. Dr Southworth and Dr Anderson will be funded by an STFC "PATT Linked" grant. The rules for this grant specifically state that it cannot be used for student training.

Training benefits

We will receive training prior to leaving on all aspects of organising and executing work at a remote location, to allow us to act as independent observers on future runs. During the first week of the observing runs we will learn many essential career-related skills for astrophysics students, e.g., safely and effectively operating a professional-class telescope, data analysis for astronomical images, observational techniques for high-precision photometry. The "hands-on" nature of the 1.0-m will give us the chance to obtain observing skills rarely available to PhD students who work only with data from bigger telescopes with dedicated operators. Observing by ourselves for a week will consolidate these skills and also enable us to develop further transferable skills such as communication and liaison skills with remote collaborators, i.e., sending nightly progress reports to our supervisors and collaborators, and working with them to plan further observations. We will be supported by observatory staff using other telescopes at SAAO during this week of solo observing.

Budget and total request

The total request from Faculty to cover both students is £1585, based on the budget shown the table below.

Item	Evans	Gill	Notes
SAAO accommodation	£530	£530	14 nights @ ZAR720/night
Cape Town accommodation	£120	£120	2 nights on arrival, 1 night on return
Airport transfers, Cape Town	£20	£20	Airport to guest house and return
Food while travelling	£50	£50	
Airport transfer, UK	£50	£50	Return only, travel with Southworth/Anderson on way out
Flights	£700	£930	Current best price
Total costs	£1470	£1700	
Total request	£735	£850	50% of total costs