RESEARCH POSITIONS
IN OBSERVATIONAL ASTRONOMY
VALPARAISO UNIVERSITY

GENERAL DESCRIPTION AND LOCATION: Funding may be available to support students on observational astronomy research projects. Students will explore close binary stars in planetary nebulae. The project is designed to help determine how stars like the Sun age and die, how planetary nebulae are formed, and how close interacting binary star systems like cataclysmic variables, symbiotic stars, and type IA supernova progenitors are formed. The project uses data from the SARA consortium telescopes, which VU has regular access to, as well as other telescopes around the globe. Students will be reducing and analyzing data in support of the larger program.

REQUIREMENTS: Students will primarily keep a day schedule, though some night-time observing will be expected. Familiarity with a computer is necessary. Experience with astronomical data reduction is preferred but not required. Students will use the image reduction program IRAF (Image Reduction and Analysis Facility). More advanced students may also use additional binary star modeling programs. Familiarity with the use of telescopes and CCDs is preferred but not a requirement. Other requirements are a willingness to work hard and carefully and a willingness to learn. Students will write and submit a report at the conclusion of the summer.

STIPEND: Each student will receive $3000 for 300 hours of research ($10 per hour). Housing will also be provided on VU’s campus.

APPLICATION: Available from Jennifer Cunningham (Jennifer.Cunningham1@valpo.edu), Prof. Leach (Katie.Leach@valpo.edu) and the MSEEED website (http://www.valpo.edu/mseed/for-current-students/). Must also complete Physics department application available on the Physics & Astronomy department web site (http://www.valpo.edu/physics/research/summer_2016/index.php).

DEADLINE: Review of applications begins Friday, 18 March 2016. Successful applicants will be notified by 1 April 2016. Please contact Dr. Hillwig (Todd.Hillwig@valpo.edu, ×5370; NSC-141) if you have any questions.