Solicitation Title: Planet-Hunting from the George P. McCook Observatory
Solicitation Deadline: February 8th, 2022
Solicitation Sponsor: Drs. Scott Engle and Edward Fitzpatrick
Solicitation Funding: Internal and External

Solicitation Summary:

We are seeking a Villanova undergraduate student for the summer research opportunity to observe known exoplanets as they transit their host stars, and to search for (and hopefully confirm) the presence and transits of suspected exoplanets (e.g. from the *TESS* Mission), in addition to other potential department observational projects (e.g. variable stars). This program will (assuming pandemic restrictions aren't put in place) make use of the telescopes and instruments available on-campus, as well as a newly arrived filter specifically purchased to increase the precision of transit observations, in addition to potential archival data. The candidate will receive training on how best to gather data from the observatory, and on data reduction/analysis techniques.

Solicitation Requirements:

The research position is open to all Villanova undergraduates that are majoring in astronomy or a closely related field. Applicants need to provide:

- a current CV that highlights commitment to excellence in the applicant's current field of study;
- a 3-page proposal that discusses the scientific background and proposed work timeline;
- a 1-page narrative on expected outcomes and procedures; and
- a 1-page personal statement that conveys the suitability and interest of the applicant.

To apply for this position, interested students need to submit their applications by the deadline in the form of a single pdf document. Only electronic submissions are accepted; email your applications to scott.engle@villanova.edu. Any applications received after the deadline will be returned without review.

Solicitation Documents:

In order to prepare a strong proposal, the following sources might be useful:

- Pages 1 and 2 of Andrew Vanderburg's Transit Light Curve tutorial
- Our website describing the observatory

In addition to these, applicants are encouraged to use their own sources of information.

Solicitation Outcome Announcement:

The review of solicitation material will begin on Feb 8, 2022 and a short-list will be assembled by Feb 15, 2022. The highest-ranking candidate will be informed and offered a position. In the event that the highest-ranking candidate accepts the position, the solicitation will be closed. Otherwise, the position will be offered to the next highest ranking applicant until the position is filled.