

Solicitation Title: Planet-Hunting from the George P. McCook Observatory  
Solicitation Deadline: January 31<sup>st</sup>, 2020  
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 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](mailto: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 1, 2020 and a short-list will be assembled by Feb 14, 2020. 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.