# Joshua V. Shields

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#### Education

PhD Student — Michigan State University, East Lansing, MI Degree Seeking - Astronomy and Astrophysics

2019 - Present

Additional Coursework — The Ohio State University, Columbus, OH

2017

Graduate Level Classes - Astronomy

 $Bachelors\ of\ Arts$ — Vassar College, Poughkeepsie, NY Triple Major - Physics, Astronomy, and Russian Studies

2012-2016

#### Research Interests

Type Ia supernovae, time-domain surveys, transients, variable stars, galactic evolution

## Research Experience

The Ohio State University — Columbus, OH

2016 - 2019

Department of Astronomy

Research Assistant - Physical, Astronomy

- Worked as part of the ASAS-SN team analyzing objects and incoming data.
- Performed original research over the large ASAS-SN dataset.

Vassar College — Poughkeepsie, NY

2015 - 2016

Observational Assistant

- Gathered astronomical observations through operation of a large visual band telescope.
- Reduced data using IRAF.

The Ohio State University — Columbus, OH

2014

Department of Population Sciences

Epidemiological Research Intern

- Designed and executed an original medical research and analysis project examining connections between social network variables and smoking status.

#### **Publications**

#### Published(14 total, 1 first author)

- 1. The ASAS-SN catalogue of variable stars V. Variables in the Southern hemisphere Jayasinghe, T. et al. 2020, MNRAS, 491, 13J
- 2. The ASAS-SN Catalog of Variable Stars IV: Periodic variables in the APOGEE survey Pawlak, Michal et al. 2019, MNRAS, 487, 5932P
- 3. The ASAS-SN Catalog of Variable Stars III: Variables in the Southern TESS Continuous Viewing Zone Jayasinghe, T. et al. 2018, MNRAS, 485, 961J
- 4. The ASAS-SN Bright Supernova Catalog IV. 2017 Holoien, T. W.-S., et al. 2019, MNRAS, 484, 1899H
- 5. The ASAS-SN Catalog of Variable Stars II: Uniform Classification of 412,000 Known Variables Jayasinghe, T. et al. 2019, MNRAS, 486, 961J
- An All-Sky Search For R Coronae Borealis Stars in ASAS-SN Shields, J. V. et al. 2019, MNRAS, 483, 4470S

- 7. K2 Observations of SN 2018oh Reveal a Two-Component Rising Light Curve for a Type Ia Supernova Dimitriadis, G. et al. 2019, ApJ, 870L, 1D
- 8. Photometric and Spectroscopic Properties of Type Ia Supernova 2018oh with Early Excess Emission from the Kepler 2 Observations
  Li, W. et al. 2019, ApJ, 870, 12L
- 9. Seeing Double: ASASSN-18bt Exhibits a Two-Component Rise in the Early-Time K2 Light Curve Shappee, B. J, et al. 2019, ApJ, 870, 13S
- 10. ASASSN-18ey: The Rise of a New Black Hole X-Ray Binary Tucker, M. A. et al. 2018, ApJ, 867, L9
- 11. The ASAS-SN catalogue of variable stars I: The Serendipitous Survey Jayasinghe, T. et al. 2018, MNRAS, 477, 3145
- 12. ASASSN-18di: Discovery of a Powerful Flare on a Mid-M Dwarf Rodríguez, R. et al. 2018, RNAAS, 2b, 8
- 13. The ASAS-SN bright supernova catalogue III. 2016 Holoien, T. W.-S. et al. 2017, MNRAS, 471, 4966
- 14. The All-Sky Automated Survey for Supernovae (ASAS-SN) Light Curve Server v1.0 Kochanek, C. S. et al. 2017, PASP, 129, 104502

## Circulars and Telegrams

Co-authored 330+ Astronomer's Telegrams and Transient Name Server reports (12 First Author)

### Computational Skills

Operating Systems - Windows, MacOS/OS X, UNIX/Linux Computer Languages - Python, IATEX, SQL, Perl, Mathematica, Java Astronomical Software - DS9, IRAF, MESA

#### References

Dr. Kris Stanek
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Dr. Chris Kochanek kochanek.1@osu.edu Professor, The Ohio State University (614)292-5954

Dr. Debra Elmegreen elmegreen@vassar.edu Professor, Vassar College (845)-437-7356