Zeeve **Rogoszinski**

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Skills

✓ Cluster/Super Computing ✓ Reporting and Proposal Writing ✓ Data Mining and Visualization

Programming Languages (proficient): Python, C, LaTeX, Mathematica, shell scripting
Programming Languages (novice): HTML/CSS
Tools & Software: Numpy, Matplotlib, Pandas, Scikit-learn, SciPy, Seaborn
Git, Jupyter Notebook, Microsoft Office, Slurm, Unix/Linux
Spoken Languages: English (native), Hebrew (advanced)

Experience

University of Maryland *College Park, MD*
Ann G. Wylie Dissertation Fellow/NASA Earth and Space Science Fellow/Graduate Student *2014-present*

- Responsible for model development, execution, and visualization of C based simulations for the evolution of planetary spin-states via spin-orbit resonances, gas accretion, and collisions.
- Developed Python post-processing tools for data aggregation (up to 1-10 TB), visualization, and statistical analysis.
- Published a novel explanation for Uranus's and Neptune's tilts that both reduces the mass and number of subsequent impacts, and preserves the planets' spin periods. Reprints, news articles, and additional information can be found on my website.
- Presented my findings at several national and divisional meetings in the US and abroad.
- Repurposed an N-body simulator using a Python wrapper to calculate the evolution of satellite orbits after 100s of collisions.
- Volunteered with the GRAD-MAP program by assisting with outreach, and helping to plan the Winter Workshop. GRAD-MAP is a diversity initiative and graduate student led organization by the Astronomy and Physics departments dedicated to sustaining ties between UMD and other minority serving institutions. For more information, visit: www.umdgradmap.org.

NASA Goddard Space Flight Center *Greenbelt, MD*
Summer Intern *2014*

- Developed a Python image processing and analysis script to study cosmic ray origins in supernova remnants.

Vassar College *Poughkeepsie, NY*
Senior Thesis *2013-2014*

- Analyzed elliptical galaxy data to find correlations between structure and star formation rates.

Williams College *Williamstown, MA*
Keck Northeast Astronomy Consortium Summer Research Fellow *2013*

- Processed and analyzed raw images from the 2012 transit of Venus to explain the black-drop effect.

Education

University of Maryland *College Park, MD*
Ph.D. in Astronomy *Aug 2020 (expected)*
Advisor: Dr. Douglas Hamilton
M.S. in Astronomy *Dec 2016*

Vassar College *Poughkeepsie, NY*
B.A. in Astronomy & Physics (Graduated with Departmental and General Honors, Sigma Xi) *Jun 2014*
Senior Thesis Advisor: Dr. Debra Elmegreen

Teaching

Astronomy 101 TA *U Maryland*
Supervisors: Grace Deming, Dr. Douglas Hamilton, Dr. Lee Mundy, Dr. Eliza Kempton *2014-2016, Fall 2019*

Academic Astronomy Intern *Vassar College*
Supervisor: Dr. Debra Elmegreen *2013-2014*

Teaching Assistant *Williams College Planetarium*
Supervisor: Dr. Jay Pasachoff *Summer 2013*