# Giannina Guzmán Caloca

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## Education

| **Villanova University** | **GPA: 3.55** |
|---|---|
| | Graduation Date: May 2019 |

Degree: **Bachelor of Science, *cum laude***
Major: Astrophysics and Planetary Science
Minor(s): Communication, Physics

**University of Maryland**

Degree: **M.S., Astronomy**  Graduation Date: January 2023
Degree: Ph.D., Astronomy  Graduation Date: *Expected*

## Professional Work Experience

★ **Public Observatory Supervisor**  **August 2015-May 2017**
  *Villanova University*

★ **NASA GSFC URAA Intern**  **June 2018-August 2018**
  *Goddard Space Flight Center*

★ **NASA'S PDART-funded 'sbpy'- developer**  **August 2018-June 2019**
  *Villanova University*

★ **Software Engineer**  **June 2019-August 2019**
  *Lowell Observatory*

## Teaching

★ **Teaching Assistant**  **August 2016-May 2018**
  *Villanova University*

★ **Teaching Assistant**  **August 2020-Present**
  *ASTR 101 - "Introduction to Astronomy"*  *University of Maryland*
  *ASTR 220 - "Collisions in Space – The Threat of Asteroid Impacts"*

## Awards and Honoraries

★ **Premio Adolfo Fortier (College Board de Puerto Rico)**  **September 2014**
★ **First place in Villanova's 2018 Sigma Xi CRF Poster Symposium**  **Spring 2018**
★ **Villanova's Dean's List**  **Fall 2016-May 2019**
★ **National Physics Honor Society**  **Fall 2017- Fall 2019**
★ **Jason A. Cardelli Memorial Award for Undergraduate Research**  **Spring 2019**
  *"The Jason A. Cardelli Memorial Award for Undergraduate Research is presented to a graduating Astronomy & Astrophysics major whose body of undergraduate research work exhibits particularly high standards of independence, originality, and quality." (Villanova University Website)*

# Publications

[1] **Guzman, G.**, Sion, E., & Godon, P. (2019). FUSE and IUE Spectroscopy of the Prototype Dwarf Nova ERUrsa Majoris during Quiescence. Astronomical Journal. DOI: 10.3847/1538-3881/ab322f and ARXIV LINK

[2] Bell, T., **et al.** (2022). Eureka!: An End-to-End Pipeline for JWST Time-Series Observations. JOSS. DOI:https://doi.org/10.48550/arXiv.2207.03585 (in review)

[3] Ginsburg, A., **et al.** (2019). astroquery: An Astronomical Web-querying Package in Python. Astronomical Journal. DOI: 10.3847/1538-3881/aafc33

[4] Mommert, M., **et al.** (2019). sbpy: A Python module for small-body planetary astronomy. JOSS. DOI: 10.21105/joss.01426

[5] van Belle, G.T., Collins, M., **Guzman, G.**, Mommert, M. (2020). Improved ASCOM Dome Following. Research Notes of the AAS. DOI: 10.3847/2515-5172/abb29b

[6] Campbell, H., Sheldon, Z., Gibson, J., **Guzman, G.** (2020). Technological and Mediated Identity in American Multisite Churches. Ecclesial Practices. DOI: 10.1163/22144417-bja10002

# Professional Experience

★ **All Hands-On Science**                                                                      **May 2017-May 2018**
     *Volunteering*
★ **Villanova Astronomical Society**                                                          **August 2015-May 2019**
     *Position of leadership (2017-2018): Treasurer*
★ **The Superlative**                                                                            **January 2016-May 2019**
     *Position of leadership (2016-2019): Public Relations and media representative*
★ **GSMI Cientifico Latino Volunteer**                                                      **August 2020-May 2021**
     *Student Mentor*
★ **Executive Secretary**                                                                          **April 2020**
     *NASA Review Panel*
★ **AbGradCon2022 Organizing Committee**                                              **May 2021-August 2022**
     *Position of leadership: Public and Media Relations*
★ **Class Representative**                                                                        **January 2021-Present**
     *Graduate Council, University of Maryland Department of Astronomy*

# Presentations

★ **Digitizing Villanova University's Eclipsing Binary Card Catalogue**                **January 2018**
     *AAS Meeting #231 Poster*
★ **Designing a Python Module for the Calculation of [..] in Comets**                    **January 2019**
     *AAS Meeting #233 Poster*
★ **The Red Thumbs: Growing Plants on Martian Regolith Simulant**                      **January 2019**
     *AAS Meeting #233 Poster - Education Category*
★ **Accurate (Exo)planetary Retrievals via High Dimensional Bayesian Samplers**        **August 2020**
     *NASA GSFC Planetary Science Division Symposium*
★ **Eureka! An End-to-End Pipeline for JWST Time Series Observations**                **February 2023**
     *First EMAC Workshop on Open-Access Exoplanet Modeling & Analysis Tools*