

**Christina Willecke Lindberg**  
Astronomy Ph.D. Candidate  
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## EDUCATION

- Ph.D. Candidate in Astronomy** 2019 - Present  
*Johns Hopkins University*  
Thesis Topic: Structure and Dynamics of the Interstellar Medium in Local Galaxies  
Research Advisor: Dr. Claire Murray (STScI)
- B.S. in Comprehensive Physics and Astronomy (Honors)** 2015 - 2018  
*University of Washington*

## NOTABLE RESEARCH PROJECTS

- Scylla** 2019 - Present  
*Advisors: Dr. Claire Murray (JHU) & Dr. Karl Gordon (STScI)*  
Obtained resolved stellar population information with the Hubble Space Telescope in the Large and Small Magellanic Clouds to inform our understanding of how dust, gas, and stars relate across a range of metallicities.
- AsteroGaP** 2018 - 2021  
*Advisor: Dr. Daniela Huppenkothen (UW DIRAC)*  
Modeled asteroid light curve profiles with Gaussian Processes, Bayesian priors, and Markov Chain Monte Carlo models.
- Werk SQuAD** 2017 - 2019  
*Advisor: Dr. Jessica Werk (UW)*  
Diagnosed quasar absorption spectra to identify gases present within the circumgalactic medium of nearby galaxies.
- REU in Astronomical Research and Instrumentation** 2017  
*Advisor: Dr. James Long (Texas A&M)*  
Classified variable sources in SDSS Stripe 82 and ran observations at McDonald Observatory.

## PUBLICATIONS

- C. W. Lindberg**, C. Murray, J. Dalcanton, J. Peek, K. Gordon, “Dust around massive stars is agnostic to galactic environment”, 2024, *accepted in ApJ*
- C. Murray et al. incl. **C. W. Lindberg**, “A Galactic Eclipse: The Small Magellanic Cloud is Forming Stars in Two, Superimposed Systems”, 2023, *accepted in ApJ*
- C. W. Lindberg**, D. Huppenkothen, R. L. Jones, B. T. Bolin, M. Jurić et al., “Characterizing Sparse Asteroid Light Curves with Gaussian Processes”, 2022, *AJ*, 163, 29
- B. Williams et al. incl. **C. W. Lindberg**, “The Panchromatic Hubble Andromeda Treasury: Triangulum Extended Region (PHATTER) I. Ultraviolet to Infrared Photometry of 22 Million Stars in M33”, 2021, *ApJS*, 253, 53

## Observing Programs as PI

- Hubble Space Telescope - 15 orbits (joint with JWST - 12 hours)*  
2023 Winging the SMC: 3D Structure of the Interstellar Medium in the Tidally Disrupted Wing of the SMC (Cycle 31)

## HONORS & AWARDS

- AAS FAMOUS Travel Grant 2022  
.Astronomy 11 Travel Grant 2019  
.Astronomy X Travel Grant 2018  
DPS Hartmann Student Travel Grant 2018  
UW Mary Gates Research Scholarship 2018

## PRESENTATIONS

- Resolving Galaxy Ecosystems Across All Scales 2023  
*Plenary Talk: Dust Around Massive Stars is Agnostic to Galactic Environment*
- 237rd Meeting of the American Astronomical Society 2021  
*Poster & Talk: Investigating Massive Stars in M31*
- 236rd Meeting of the American Astronomical Society 2020

<i>Poster: Studying Nearby Low-Metallicity Environments with Scylla</i>	2019
233rd Meeting of the American Astronomical Society	
<i>Talk: A Bayesian-Based Method for Inferring Asteroid Properties from Sparse Light Curve</i>	2018
50th Meeting of the Division of Planetary Sciences	
<i>Talk: A Bayesian-Based Method for Inferring Asteroid Properties from Sparse Light Curve</i>	2018
Mary Gates 21st Annual Undergraduate Research Symposium	
<i>Talk: Werk SQuAD: The Quest to Better Understand Galaxies and Their Surrounding Medium</i>	2018
231rd Meeting of the American Astronomical Society	
<i>Poster: Classifying Variable Sources in SDSS Stripe 82</i>	2018

## **LEADERSHIP EXPERIENCE**

President	2022 - 2023
<i>Johns Hopkins Physics and Astronomy Graduate (PAGS) Students Association</i>	
Coordinated student initiatives to improve the graduate experience within the JHU Physics and Astronomy Department e.g. pay raises, travel grants, professional society memberships, mentorship program, etc. Led discussions with the department chair and graduate program committee to improve faculty-student communication.	
Founder & Organizer	2022 - 2023
<i>No-Z Galaxy Journal Club</i>	
Founded a cross-institutional journal club for discussing recent publications and seminal works on nearby galaxy evolution.	
STScI Liaison	2021 - 2022
<i>Johns Hopkins Physics and Astronomy Graduate (PAGS) Students Association</i>	
Fostered connections between the JHU and STScI community by organizing weekly student discussions with colloquium speakers and helping students find research projects at STScI.	
Chapter Treasurer	2017 - 2018
<i>Institute of Nuclear Materials Management at UW</i>	
Collaborated with other club members on Molten Salt Reactors to model reactions with government-issued software.	

## **WORKSHOPS**

Inclusive Astronomy 2	2019
<i>Space Telescope Science Institute</i>	
Autism Spectrum Disorder, LGBTQ+ inclusion in astronomy, indigenous knowledge of astronomy, accessibility improvements for deaf and blind researchers.	
.Astronomy 11	2019
<i>Dunlap Institute at the University of Toronto</i>	
Public engagement and outreach, presentation workshops, quantifying environmental impact of conferences, integration of indigenous knowledge of astronomy, and lots of hackday projects.	
.Astronomy X	2018
<i>Space Telescope Science Institute</i>	
Bokeh plotting, planetary atmospheres, and equity, diversity, and inclusion within the field of astronomy.	
Astro Hack Week	2017
<i>eScience Institute at the University of Washington</i>	
Intro to machine learning, Bayesian inference, frequentist statistics, databases, numerical Python, Git, and visualization. Participated in week-long Hackathon, working on several short-term projects.	

## **TEACHING**

### **Johns Hopkins University**

AS.173.112 <i>General Physics Lab II</i>	2020
AS.171.108 <i>General Physics: Electromagnetism (Active Learning)</i>	2020
AS 173.111 <i>General Physics Lab I</i>	2019
AS 171.101 <i>General Physics: Physical Science</i>	2019

### **University of Washington**

ASTR 150 <i>The Planets</i>	2018 - 2019
ASTR 101 <i>Introductory Astronomy</i>	2018 - 2019
PHYS 122 <i>Electromagnetism</i>	2018