

# Emily Biermann

PHD CANDIDATE · ASTROPHYSICIST

Pittsburgh, PA

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## Education

### University of Pittsburgh

PHD IN PHYSICS

**Thesis:** Exploring the Millimeter Transient Sky  
*Advised by Arthur Kosowsky*

Pittsburgh, PA

In Progress

### University of Pittsburgh

M.S. IN PHYSICS

Pittsburgh, PA

Aug. 2019 - Dec. 2021

### Stony Brook University

B.S. IN PHYSICS AND ASTRONOMY

**Thesis:** Composing an Answer Key for Weighing the Giant's Photometric Redshifts  
*Advised by Anja von der Linden*

Stony Brook, NY

Sep. 2015 - May. 2019

## Honors & Awards

2021	<b>Honorable Mention</b> , NSF Graduate Research Fellowships Program	University of Pittsburgh
2019	<b>Fellowship Recipient</b> , Elizabeth U. Baranger Predoctoral First Year Fellowship	University of Pittsburgh
2020	<b>Fellowship Recipient</b> , University of Pittsburgh Kenneth P. Dietrich School of Arts and Sciences Fellowship	University of Pittsburgh
2019	<b>Magna Cum Laude</b> , Bachelor of Science	Stony Brook University
2019	<b>Departmental Honors</b> , Dept. of Physics	Stony Brook University
2019	<b>Departmental Honors</b> , Dept. of Astronomy	Stony Brook University
2018	<b>Membership</b> , Sigma Pi Sigma National Physics Honor Society	Stony Brook University
2015	<b>Award Recipient</b> , Undergraduate Provost's Scholarship (\$40,000)	Stony Brook University

## Research Projects

### Blind search for millimeter transients in ACT data

ADVISOR: ARTHUR KOSOWSKY

University of Pittsburgh

Jan. 2020 - Present

### Simulations of the CMB moving lens effect

ADVISOR: ARTHUR KOSOWSKY

University of Pittsburgh

Sep. 2019 - Jan. 2020

### Photometric redshift calibration for weak lensing cluster catalogs

ADVISOR: ANJA VON DER LINDEN

Stony Brook University

Jan. 2019 - July 2019

## Talks and Presentations

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Jan 2023	<b>ACT Systematic Transient Search</b> , AAS 241 Winter Meeting	<i>contributed</i>
July 2022	<b>Transients in ACT Data</b> , CMB-S4 Transients and Sources Workshop	<i>invited</i>
May 2022	<b>Numpy I</b> , Python Bootcamp	<i>workshop</i>
April 2022	<b>Transients in ACT Data</b> , April APS Meeting	<i>contributed</i>

## Community Engagement

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### Astro On Tap: Pittsburgh

PRESENTER: *Say Cheese! Capturing Our Galaxy's Camera-Shy Black Hole*

*Two Freys Brewing, Pittsburgh PA*

*June 2022*

### AHN Burn Camp

GUEST INSTRUCTOR

*Camp Kon-O-Kwee, Fombell PA*

*June 2022*

### Ultimate Science Sunday

POSTER PRESENTER: *IceCube*

*World Science Festival, New York City NY*

*June 2017*

### IceCube Masterclass: Connecting students and researchers through IceCube

FACILITATOR

*Stony Brook University, Stony Brook NY*

*March 2017*

## Diversity and Inclusion

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### Dept. of Physics and Astronomy Equity and Inclusion Committee

COMMITTEE MEMBER

*University of Pittsburgh, PA*

*Jun. 2020 - PRESENT*

### Ultra-VioLets

MODERATOR & FOUNDING MEMBER OF DEPARTMENT LGBTQ+ AFFINITY GROUP

*University of Pittsburgh, PA*

*Jun. 2020 - PRESENT*

## Teaching Experience

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### PHYS 0111: Introduction to Physics 2

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: DONNA NAPLES

*University of Pittsburgh*

*Spring 2023*

### PHYS 0110: Introduction to Physics 1

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: JONATHAN BEAUMARIAGE

*University of Pittsburgh*

*Spring 2023*

### PHYS 0110: Introduction to Physics 1

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: MATTEO BROCCIO

*University of Pittsburgh*

*Spring 2022*

### PHYS 0110: Introduction to Physics 1

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: MATTEO BROCCIO

*University of Pittsburgh*

*Fall 2021*

### PHYS 0111: Introduction to Physics 2

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: NICOLAE ALBU

*University of Pittsburgh*

*Summer 2021*

**PHYS 0110: Introduction to Physics 1**

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: TROY RAEN

*University of Pittsburgh*

*Summer 2021*

**PHYS 0110: Introduction to Physics 1**

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: MATTEO BROCCIO

*University of Pittsburgh*

*Spring 2021*

**PHYS 0110: Introduction to Physics 1**

RECITATION TA, UNDERGRADUATE COURSE, INSTRUCTOR: MATTEO BROCCIO

*University of Pittsburgh*

*Fall 2020*

**Voyage Academcis**

STEM/SAT PREP ACADEMIC TUTOR

*Suffolk County, NY*

*May. 2018 - July 2018*