

# Allison (Allie) McCarthy

Boston University

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## Education

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<b>Boston University</b> Boston, MA	Graduate Ph.D. Student in Astronomy Supervisor: Professor P. Muirhead	Sept. 2020 – Present
<b>The University of Alabama</b> Tuscaloosa, AL	BS in Physics Supervisor: Professor J. Bailin	Aug. 2016 – May 2020

## Research Appointments

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<b>Boston University</b> Supervisor: Dr. P. Muirhead	<b>Graduate Student</b> Studying brown dwarf variability to determine the surface features of brown dwarfs.	May 2020-Present
<b>The University of Alabama</b> Supervisor: Dr. J. Bailin	<b>Undergraduate Student</b> Studied the evolution of Milky-Way like galaxies using the MUGS simulations.	Aug. 2017 – May 2020
<b>The American Museum of Natural History</b> Supervisors: Dr. J. Vos, Dr. J. Faherty, Professor K. Cruz	<b>REU Summer Intern</b> Studied the variability of brown dwarfs and low mass stars using K2 to independently verify the rotation rate of two different sub-stellar objects as well as the evolution of their light curves.	May 2019 – Aug. 2019
<b>Green Bank Observatory</b> Supervisor: Dr. A. Seymour	<b>REU Summer Intern</b> Studied FRB 110523 using archival Arecibo telescope data to determine if it is a repeating fast radio burst.	May 2018 – Aug. 2018

## Teaching Experience

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<b>The University of Alabama</b> Dr. Murray Silverstone	<b>Learning assistant</b> PH 101: General Physics I	Spring 2019
<b>The University of Alabama</b> Dr. Gary Mankey	<b>Learning assistant</b> PH 106: General Physics w/Calculus II	Fall 2018
<b>The University of Alabama</b> Dr. Amy Lang	<b>Teaching assistant, Aerospace Engineering</b> AEM 201: Statics	Fall 2018

## Honors and Scholarships

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Boston University	<b>NSF Graduate Research Fellowship</b>	2021
	3 year full tuition fellowship with additional stipend	
Boston University	<b>Clare Boothe Luce Fellowship</b>	2020
	2 year full tuition fellowship with additional stipend	
The University of Alabama	<b>Randall Research Scholars Senior Leadership Award</b>	2020
American Astronomical Society	<b>Chambliss Astronomy Achievement Student Award</b>	2020
	Recognize exemplary research by an undergraduate student.	
The University of Alabama	<b>Randall Research Scholars Outstanding Junior</b>	2019
The University of Alabama	<b>Goldwater Scholarship Nominee</b>	2019
The University of Alabama	<b>Randall Research Scholars Outstanding Sophomore</b>	2018
The University of Alabama	<b>Presidential Scholarship</b>	2016
	8 semester full tuition scholarship with additional stipend	

## Publications

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**McCarthy, A., & Vos, J.** 2020, *Brown Dwarf Variability in the Optical: Results from K2 and TESS* in American Astronomical Society Meeting Abstracts, Vol. 235, American Astronomical Society Meeting Abstracts 235, 274.05.

**McCarthy, A. M.** 2019, *The Search for a Repeating Fast Radio Burst* in American Astronomical Society Meeting Abstracts, Vol. 233, American Astronomical Society Meeting Abstracts 233, 347.05

## Presentations

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**McCarthy, A., & Vos, J.,** *Brown Dwarf Variability in the Optical: Results from K2 and TESS*

Poster at the 235th meeting of the American Astronomical Society Jan. 2020

Oral presentation at the American Museum of Natural History Aug. 2019

**McCarthy, A., Bailin, J.** *Tracking the Evolution of Simulated Galaxies*

Poster at The University of Alabama Undergraduate Research Conference Mar. 2019

**McCarthy, A. M.,** *The Search for a Repeating Fast Radio Burst*

Poster at Conference for Undergraduate Women in Physics Feb. 2019

Poster at the 233rd meeting of the American Astronomical Society Jan. 2019

Oral presentation at Green Bank Observatory Aug. 2018

**McCarthy, A., Bailin, J.** *Synthetic Images of Simulated Galaxies*

Poster at The University of Alabama Undergraduate Research Conference (UA)	Mar. 2018
Poster at Conference for Undergraduate Women in Physics	Feb. 2018
Oral presentation at RRS Live Research Presentation	Dec. 2017

## Service and Outreach

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H.H. Wells Middle School Brewster, NY	<b>Women in Science Week Speaker</b> Met with 6th grade students to discuss being a woman in science. Answered questions regarding how to become a scientist and an astronomer as well as being a woman in science.	Feb. 2021
The University of Alabama Tuscaloosa, AL	<b>"Spooky Lab"- Haunting at the Museum</b> Planned and executed this event. Volunteers taught the physics behind spooky phenomenon (Van der Graff generator, floating magnets, etc.).	Oct. 2019
The University of Alabama Tuscaloosa, AL	<b>Local Organizing Committee</b> <b>Conference for Undergraduate Women in Physics</b> Planned and organized the 2019 Conference for Undergraduate Women in Physics hosted at The University of Alabama.	Jan. 2018- Jan. 2019

## Professional Memberships

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<b>American Astronomical Society</b> Student Member	Jan. 2020 – Present
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## Media Coverage

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<b>Science News</b>	<i>A second repeating fast radio burst has been tracked to a distant galaxy</i>	Jan. 2019
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