

# Gillen Brown

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## University of Michigan

Ph.D. in Astronomy

Advisor: Oleg Y. Gnedin

Topic: Chemical Evolution of Simulated Milky Way Sized Galaxies

Ann Arbor, MI

September 2016-present

## University of Missouri-Kansas City (UMKC)

B.S. Physics with emphasis in Astronomy

Math and Computer Science minors

Kansas City, MO

May 2016

## Publications

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- **Brown, G.**, Gnedin, O. Y., “Nuclear Star Clusters in Cosmological Simulations”, 2018, ApJ, 864, 94
- Gonzalez, A., Gettings, D., Brodwin, M., et al. including **Brown, G.**, “The Massive and Distant Clusters of WISE Survey. I: Survey Overview and a Catalog of  $>2000$  Galaxy Clusters at  $z \simeq 1$ ”, 2019, ApJS, accepted

## Academic Presentations

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- University of Michigan Graduate Student Lunch Talks, December 2019, talk: “Galactic Chemical Evolution in Cosmological Simulations”
- University of Michigan Graduate Student Lunch Talks, April and September 2017, talk: “Nuclear Star Clusters in Cosmological Simulations”
- UMKC Graduate Student Seminar, April 2016, talk: “Quantifying the Effect of WISE Data on Euclid Stellar Mass Estimates”
- Mid-American Regional Astrophysics Conference, April 2016, talk: “Quantifying the Effect of WISE Data on Euclid Stellar Mass Estimates”
- Mid-American Regional Astrophysics Conference, April 2015, talk: “An Accurate Method for Measuring Redshifts of High Redshift Galaxy Clusters”

## Teaching

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### Graduate Student Instructor

2017, 2019

Led discussion sections and graded work for introductory astronomy classes for non-science majors

### Supplemental Instruction (SI) Mentor

Fall 2015 — Spring 2016

Assisted other SI leaders in developing and executing group study sessions

Helped in developing SI Leader training

### Supplemental Instruction Leader

Fall 2014 — Fall 2015

Led study groups for calculus-based introductory physics classes.

Awarded *SI Leader of the Term* for Spring 2015

### Teaching Assistant

Fall 2014 — Spring 2015

Assisted in class and graded labs for introductory astronomy lab for non-science majors

## Outreach

### **University of Michigan Museum of Natural History Science Communication Fellow** 2019

Includes professional development workshops on effectively engaging the public  
Will create a hands-on activity to share with K-12 students at Museum events

### **Public Talks**

Ellis Library & Reference Center, *upcoming: July 2019*, "The Scientific Legacy of the Moon Landings"  
Nerd Nite Ann Arbor, *upcoming: March 2019*, "Making a Universe From Scratch"  
Ignite Ann Arbor, November 2018, "Reclaiming the Night Sky"

### **Vice President of UMKC Society of Physics Students** 2014 — 2016

Engaged in many science outreach activities and physics demonstrations to local groups  
Organized partnerships with local under-served school districts to enrich science education

## Activities and Awards

### **UM Astronomy Curriculum Committee — Graduate Student Representative** 2018 — present

Helped manage the undergraduate and graduate astronomy curriculum

### **Graduate Student Colloquium Lunch Organizer** 2018 — present

Organized and ordered food for the weekly graduate student lunches with the colloquium speaker

### **Michigan Dark Skies Group Member** 2017 — present

Met with an Ann Arbor City Council committee to encourage action to reduce light pollution  
Met with real estate developers and architects to encourage dark sky friendly lighting

### **UMKC Galaxy Evolution Group Member** 2014 — 2016

Developed a series of Python tutorials for new group members  
Developed a Python library for our group to make plotting easier and more visually attractive

### **UMKC SEARCH Research Grants** 2016

Awarded 2 research grants to pursue undergraduate research at UMKC

### **Undergraduate Research Ambassador** Fall 2015 — Spring 2016

Presented at multiple events to recruit students into getting involved in undergraduate research

### **Undergraduate Research Day at the Capitol** 2015

Presented my research to representatives and aides at the Missouri State Capitol