

Gillen Brown

Department of Astronomy, University of Michigan — gillenb@umich.edu

Education

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 — May 2022

University of Missouri-Kansas City (UMKC)

B.S. Physics with emphasis in Astronomy

Math and Computer Science minors

Kansas City, MO

May 2016

Publications

3. **Brown, G.**, Gnedin, O. Y., “Improving performance of zoom-in cosmological simulations using initial conditions with customized grids”, 2021, *New Astronomy*, 84, 101501
2. **Brown, G.**, Gnedin, O. Y., “Nuclear Star Clusters in Cosmological Simulations”, 2018, *ApJ*, 864, 94
1. 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*, 240, 33

Presentations

- Santa Cruz Galaxy Workshop, August 2019, poster: “Star Cluster Formation in Cosmological Simulations”
- 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”

Awards, Grants, and Computing Time Allocations

University of Michigan — Rackham Predoctoral Fellowship

2021-2022

UM Astronomy DEI Champion Award Winner

2021

XSEDE Stampede2 — 7.44 million CPU-hour allocation, Co-I (Oleg Y. Gnedin)

2020

Michigan Institute for Computational Discovery and Engineering — Catalyst Grant, Co-I (Oleg Y. Gnedin)

2020

Teaching

Graduate Student GSI Mentor

Fall 2019 — Present

GSI, Astro 201 — Introduction to Astrophysics

Winter 2021

Instructor of Record, Astro 127 — Naked Eye Astronomy

Spring 2019

GSI, Astro 102 — Introductory Astronomy: Stars, Galaxies, and the Universe

Winter 2019

GSI, Astro 107 — The Dark Side of the Universe

Winter 2019

GSI, Astro 101 — Introductory Astronomy: The Solar System and Search for Life

Winter & Fall 2017

Activities

UM Astronomy Antiracism Reading Group — Leadership Team	2020 — present
UM Astronomy Galaxy Group Organizer	2019 — present
UM Astronomy Curriculum Committee — Graduate Student Representative	2018, 2021
Michigan Institute for Data Science — Basketball Data Challenge — Winner	2020
UM Astronomy Prospective Student Weekend Organizer	2020
UM Astronomy Prelim Review Committee — Graduate Student Representative	2019 — 2020
UM Astronomy Graduate Student Colloquium Lunch Organizer	2018 — 2019

Outreach

Astronomy on Tap: Ann Arbor — Leadership Team	2019 — present
Michigan Dark Skies Group Member	2017 — present
University of Michigan Museum of Natural History Science Communication Fellow	2019

Public Talks

Warren Astronomical Society, “Origin of the Elements”	May 2021
Plymouth District Library, “Light Pollution and Michigan’s Dark Skies”	February 2021
University of Michigan Museum of Natural History, “Building the Universe”	9 times in 2019 — 2020
Astronomy on Tap: Ann Arbor, “Origin of the Elements”	October 2019
Ann Arbor Hands-On Museum, “How the Moon Formed”	July 2019
Ellis Library & Reference Center, “The Scientific Legacy of the Moon Landings”	July 2019
Nerd Nite Ann Arbor, “Origin of the Elements”	March 2019
Ignite Ann Arbor, “Reclaiming the Night Sky”	November 2018