

ALYSSA D. SOKOL

Department of Astronomy, University of Massachusetts Amherst
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EDUCATION

University of Massachusetts Amherst *August 2015 - Present*
Amherst, MA
PhD in Astronomy (expected 2021), Advisor: Dr. Min Yun

Colgate University *August 2010 - May 2014*
Hamilton, NY
B.A. in Physics & Astronomy

RESEARCH FELLOWSHIPS

Spaulding-Smith Diversity Fellowship for minorities in STEM 2015-2020
Fully funded first and final year of PhD program for underrepresented minorities pursuing STEM fields.

Massachusetts Space Grant Consortium Summer Fellowship 2017,2018,2019

2018 Australia-Americas PhD Visiting Research Fellowship 2018
Visiting research fellowship funded by The Australian Academy of Science; 3-month visiting research fellow at Mount Stromlo Observatory part of Australian National University in Canberra, ACT. Advisor: Dr. Mark Krumholz, Project Title: 'Bayesian forward modelling of star cluster populations.'

TRAVEL GRANTS

AAS International Travel Grant 2018,2019

IAU Travel Grant 2019

Mary Daily Irvine Travel Grant 2017,2018,2019

AAS FAMOUS Diversity Travel Grant 2017

INVITED COLLOQUIUM TALKS

“H-alpha Luminous Star Clusters in Dwarf Galaxies: Investigating the Universality of the IMF with Bayesian SED fitting”

Research School of Astronomy and Astrophysics Colloquium

Australia National University, Canberra, ACT July 2018

Physics & Astronomy Colloquium

Colgate University, NY April 2018

CONTRIBUTED PRESENTATIONS

Oral:

AAS Winter 2021- Dissertation Talk January 2021

UMass Amherst Galaxy Lunch November 2020

Dave Sanders' 30th Anniversary:Luminous Starbursts and AGN- Honolulu, HI January 2020

AAS Winter 2020- Honolulu, HI January 2020

UMass Amherst Galaxy Lunch November 2019

Calzetti-Kennicutt SF Meeting- Texas A&M University, TX	November 2017
New England Star Formation Conference- Yale University, CT	January 2017
NEROC Radio Science Symposium- MIT Haystack Observatory, MA	November 2016
Star Formation Lunch Talk- INAOE, Puebla, Mexico	March 2016
New England Star Formation Conference- Harvard Center for Astrophysics, MA	January 2016
Poster:	
IAU 352: Galaxy Evolution in the JWST and ALMA Era- Porto, Portugal	June 2019
Dusting the Universe Conference- Tucson, AZ	March 2019
The Olympian Symposium- Paralia, Greece	June 2018
AAS Winter 2017- Grapevine, TX	January 2017

TEACHING EXPERIENCE

Instructor: Modern Astronomy Summer High School Course	2019,2020
<i>Designed and taught lectures, Python-based labs at UMass Amherst for high school students.</i>	
Instructor: Astronomy 100/101 Lab	2018-2020
<i>Led Team Based Learning lab classes.</i>	
Teaching Assistant: Astronomy 301: Scientific Writing	2019-2020
<i>Provided commentary & feedback to improve grammar, style, and quality of science writing for Astronomy majors.</i>	
Teaching Assistant: Astronomy 100	2018-2020
<i>Assisted students with concepts, homework, and exam preparation. Substitute-taught lectures.</i>	

OBSERVING EXPERIENCE

The Large Millimeter Telescope- Puebla, Mexico	
<i>Instruments: AzTEC 1.1mm camera, Redshift Search Receiver</i>	March 2016

RESEARCH SKILLS

Proficient fitting codes: SED3FIT, MAGPHYS, CIGALE, Starburst99
 Languages: Python
 Advanced Computing: MIT Supercloud Supercomputer

SERVICE

UMass Amherst Astronomy Department:	
Graduate Program Curriculum Restructuring Committee, Member	2019-2020
<i>Served as graduate student representative to redesign curriculum, inspection/familiarity with program structure at UMass and other departments, developed new ideas for restructuring course content, course sequence, and the qualifying exam. Acted as liaison between faculty, committee, and graduate students to solicit feedback and approval on implementing new design and ideas.</i>	
Volunteer at UMass AAS Undergraduate Reception Booth	2017,2020
Graduate Student Recruitment Committee, Chair	2017-2020
<i>Organized and led department visits for prospective graduate students, served as primary point of contact for all visiting students, scheduled and organized group research presentations and individual meetings for visits, primary contact person for sustained communication following visit.</i>	
Mary Dailey Irvine Travel Grant Committee, Member	2018

DIVERSITY & INCLUSION SERVICE

UMass Amherst Astronomy Department:

Diversity, Equity & Inclusion Committee, Graduate Student Member 2020

Organized department-wide meetings and discussion for STEM Strike for Black Lives, working with small team to create long-term plan of increasing diversity in Astronomy department, brainstorming recruitment techniques that increase diversity of applicant pool (working with bridge-to-PhD programs), managing support for minority students at UMass (fellowship information, mental health resources, graduate community).

Department Climate Committee, Graduate Student Member 2018

Developed new ways to make climate more collaborative, friendly, & immersive by planning new department lounge and events to bring together undergraduate, graduate, and faculty groups.

OUTREACH

Ask an Astronomer Day- Springfield Elementary School, MA 2018,2019

Eureka! Girls Inc. Summer 2016

Assisted in Astronomy portion of Summer Program to immerse 8th grade girls in STEM fields; taught and demonstrated concepts at UMass Sunwheel, observatory, and computer labs.

PUBLICATIONS

1. **Alyssa D. Sokol**, R. A. Gutermuth, et. al, *Early science with the Large Millimetre Telescope: An LMT/AzTEC 1.1 mm Survey of dense cores in the Monoceros R2 giant molecular cloud*, 2019 MNRAS.483..407S
2. R. Pokhrel, R. A. Gutermuth, S. Betti, S. R. Offner, P. C. Myers, S. T. Megeath, **A. D. Sokol**, et al, *Star-Gas Surface Density Correlations in 12 Nearby Molecular Clouds. I. Data Collection and Star-sampled Analysis*, 2020 ApJ, 896, 60.