

# ALYSSA D. SOKOL

Department of Astronomy, University of Massachusetts Amherst  
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## EDUCATION

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**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

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**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

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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

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**“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

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**Oral:**

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, Pueblo, Mexico	March 2016
New England Star Formation Conference- Harvard Center for Astrophysics, MA	January 2016
<b>Poster:</b>	
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

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

## OBSERVING EXPERIENCE

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

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

## SERVICE

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<b>UMass Amherst Astronomy Department:</b>	
Graduate Program Curriculum Restructuring Committee, Member <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>	2019-2020
Volunteer at UMass AAS Undergraduate Reception Booth	2017,2020
Graduate Student Recruitment Committee, Chair <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>	2017-2020
Mary Dailey Irvine Travel Grant Committee, Member	2018

## DIVERSITY & INCLUSION SERVICE

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### 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

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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

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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.