

## Dr. Meredith A. MacGregor

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CONTACT INFORMATION	University of Colorado Boulder Dept. of Astrophysical and Planetary Sciences Boulder, CO 80309	(303) 492-9629 meredith.macgregor@colorado.edu <a href="https://casa.colorado.edu/~mema5817/">https://casa.colorado.edu/~mema5817/</a>
RESEARCH INTERESTS	Circumstellar disk structure and evolution Planet–disk interactions Radio interferometry	Planetary system formation Stellar activity and impact on habitability Aperture synthesis techniques
EDUCATION	<b>Harvard University</b> , Cambridge, MA  Ph.D., Astronomy and Astrophysics, May 2017 <ul style="list-style-type: none"><li>• Thesis Title: ‘Millimeter Studies of Nearby Debris Disks’</li><li>• Advisor: Dr. David J. Wilner</li></ul> M.A., Astronomy and Astrophysics, May 2013  <b>Harvard University</b> , Cambridge, MA  B.A., Astronomy and Astrophysics, Physics, June 2011 <ul style="list-style-type: none"><li>• <i>Cum Laude</i></li><li>• Thesis Title: ‘A Search for Fast Optical Transients’</li><li>• Advisor: Prof. Edo Berger</li></ul>	
ACADEMIC POSITIONS	<b>Assistant Professor</b> University of Colorado Boulder Dept. of Astrophysical and Planetary Sciences	Jan. 2020 – present
	<b>NSF Postdoctoral Fellow, Carnegie Fellow</b> Carnegie Department of Terrestrial Magnetism Supervisor: Dr. Alycia J. Weinberger	Sept. 2017 – Jan. 2020
	<b>Postdoctoral Researcher</b> Harvard-Smithsonian Center for Astrophysics Supervisor: Dr. David J. Wilner	May 2017 – Sept. 2017
	<b>Graduate Research Assistant</b> Dept. of Astronomy, Harvard University Advisor: Dr. David J. Wilner	Sept. 2011 – May 2017
	<b>Undergraduate Research Assistant</b> Dept. of Astronomy, Harvard University Advisor: Prof. Edo Berger	Dec. 2009 – June 2011
	<b>NSF REU</b> National Radio Astronomy Observatory Advisor: Dr. Jeffery G. Mangum	May 2010 – Aug. 2010
	<b>NSF REU</b> Maria Mitchell Observatory Advisor: Dr. Vladimir Strel'nitski	May 2009 – Aug. 2009
PUBLICATIONS	31 publications in total (11 first author, 3 second author, 10 co-author, 7 unrefereed) with 537 citations and h-index of 15 (from ADS). A complete listing is at the end.	
AWARDS	Fellowships and Scholarships <ul style="list-style-type: none"><li>• Scialog Fellow, Signatures of Life in the Universe</li><li>• NSF Astronomy and Astrophysics Postdoctoral Fellowship</li><li>• Carnegie Postdoctoral Fellowship, Carnegie DTM</li><li>• Jansky Postdoctoral Fellowship (declined)</li><li>• John P. And Carol J. Merrill Graduate Fellowship</li></ul>	2020 2017 2017 2017 2013

- National Science Foundation Graduate Research Fellowship 2011
- Smith Family Graduate Science and Engineering Fellowship 2011
- Intel Science Talent Search Scholarship 2007
- Micron Science and Technology Scholarship 2007
- USA Today All-USA High School Academic Scholarship 2007
- National Merit Scholarship 2007
- Intel Foundation Young Scientist Scholarship 2006
- Office of Naval Research Scholarship 2005

Grants

- Swift Guest Observer Support, Science PI (\$31,100) 2019
- HST Guest Observer Support, Science PI (\$308,196) 2018
- NRAO Student Observing Support, Science PI (\$8,937) 2018
- NSF Special Programs in Astronomy AST-1844677, Collaborator (\$22,911) 2018
- ALMA Postdoctoral Ambassador (\$10,000) 2018
- NSF Astronomy and Astrophysics Postdoctoral Fellowship (\$300,000) 2017

Teaching Awards —Harvard University

- Certificate of Distinction in Teaching (Astronomy 201b) 2015
- Bok Center Teaching Certificate 2014
- Certificate of Distinction in Teaching (Astronomy 17) 2012
- Certificate of Distinction in Teaching (Astronomy 16) 2012

Student Awards —Harvard University, Dept. of Astronomy

- Goldberg Award for Outstanding Senior Thesis 2011
- Goldberg Award for Outstanding Junior Thesis 2010

OBSERVING  
EXPERIENCE  
AND PROPOSALS

To date, I have been PI of 8 accepted ALMA proposals, 1 Swift proposal (and 2 additional ToO), 1 HST proposal, 1 Chandra DDT proposal, 7 SMA proposals (and 5 additional filler programs), 3 VLA proposals, 1 ATCA, and 1 NOAO proposal totaling over 500 hours of time. I have also been co-I on 16 other successful ALMA proposals, 10 SMA proposals, 1 VLA proposal, and 2 GBT proposals. A list of accepted PI proposals follows:

23. *A Search for Circumstellar and Interstellar Gas in The HD 15115 System* 12/2019  
10 hours; NOAO CHIRON; ID: 2020A-0272
22. *Constraining Collisional Models of Planetesimals in Debris Disks* 12/2019  
48 hours; VLA B-Ranked; ID: 20A-219
21. *The Origin and Impact of Flares in M Dwarf Systems* 11/2019  
66.9 hours; AMA Cycle 7 Supplemental Call; ID: 2019.2.00141.S
20. *The Origin and Impact of Flares in M Dwarf Systems* 05/2019  
4 tracks; SMA A-Ranked; ID: 2019A-S019
19. *The Origin and Impact of Flares in the Proxima Centauri Planetary System* 03/2019  
25.2 ks; Chandra DDT; Proposal Number: 20208674
18. *The Origin and Impact of Flares in the Proxima Centauri Planetary System* 02/2019  
90 ks; Swift Cycle 15; ID: 1518177
17. *The Origin and Impact of Flares in the Closest Planetary System* 11/2018  
44 orbits; HST Cycle 26; ID: GO15651
16. *The Origin and Impact of Flares in M Dwarf Systems* 11/2018  
8 tracks; SMA B-Ranked; ID: 2018B-S045
15. *Millimeter Monitoring of the Closest Planetary System -  
Stellar and Dust Emission from Proxima Centauri* 07/2018  
62.9 hours; ALMA Cycle 6 A-Priority; ID: 2018.1.00470.S
14. *Probing Planet-Disk Interactions in the Fomalhaut System* 07/2018  
6.4 hours; ALMA Cycle 6 B-Priority; ID: 2018.1.00582.S

13. *Probing Planet-Disk Interactions in the Fomalhaut System* 07/2017  
6.4 hours; ALMA Cycle 5 B-Priority; ID: 2017.1.01043.S
12. *Debris Disk Structure Around Nearby Sun-like Stars with the ACA* 07/2017  
14.5 hours; ALMA Cycle 5 C-Priority; ID: 2017.1.01054.S
11. *Debris Disk Structure Around Nearby Sun-like Stars with the ACA* 05/2017  
14.5 hours; ALMA Cycle 4 Filler; ID: 2016.2.00015.S
10. *Debris Disks Around Tau Ceti and Epsilon Eridani* 08/2016  
17.7 hours; ALMA Cycle 4 C-Priority; ID: 2016.1.00803.S
9. *Structure of the 56 Aur Debris Disk* 10/2015  
4 tracks; SMA B-Ranked; ID: 2015B-S014
8. *Structure of the HD 32297 Debris Disk* 10/2014  
2 tracks; SMA A-Ranked; ID: 2014B-S001
7. *Deciphering Debris Disk Structure and Eccentricity* 05/2014  
2 tracks; SMA B-Ranked; ID: 2014A-S051
6. *Structure in the Eps Eridani Debris Disk* 04/2014  
48 hours; ATCA A-Ranked; ID: C2931
5. *Constraining Collisional Models of Planetesimals in Debris Disks* 11/2013  
28 hours; VLA A- and B-Ranked; ID: 14A-225
4. *Constraining the Structure and Eccentricity of Debris Disks* 11/2013  
3 tracks; SMA B-Ranked; ID: 2013B-S049
3. *Structure of the HD 15115 Debris Disk* 05/2013  
2 tracks; SMA A-Ranked; ID: 2013A-S024
2. *Testing Collisional Models of Planetesimals in the AU Mic Debris Disk* 11/2012  
2.5 hours; VLA A-Ranked; ID: 13A-301
1. *Resolving Millimeter Emission from the q1 Eri Debris Disk* 11/2012  
2.6 hours; ALMA Cycle 1 B-Priority; ID: 2012.1.00112.S

INVITED TALKS,  
SEMINARS, AND  
COLLOQUIA

- |   |      |
|---|------|
| Stars and Planets in the Ultraviolet, Tempe, AZ                             | 2020 |
| Spirit of Lyot Conference, Tokyo, Japan                                     | 2019 |
| Kavli Futures of Exoplanets, TESS Science Conference, Boston, MA            | 2019 |
| Understanding the Nearby Star-forming Universe with JWST, Courmayeur, Italy | 2019 |
| Barry Blumberg Astrobiology Workshop, Green Bank Observatory, WV            | 2019 |
| CosmoMeet, University of Maryland, College Park, MD                         | 2019 |
| Liz Myhill Memorial Seminar, Marymount University, Arlington, MD            | 2019 |
| DTM Lunch & Learn, Carnegie DTM, Washington, DC                             | 2019 |
| NASA Goddard ASD Colloquium Series, Greenbelt, MD                           | 2019 |
| Society for Science and the Public Alumni Panel, Washington, DC             | 2019 |
| SOFIA Colloquium, NASA Ames, Mountain View, CA                              | 2019 |
| University of Wisconsin Colloquium, Madison, WI                             | 2019 |
| University of Colorado APS Colloquium, Boulder, CO                          | 2019 |
| Penn State Center for Exoplanets and Habitable Worlds, State College, PA    | 2019 |
| Exploring our Cosmic Origins: New Results from ALMA, AAS 233, Seattle, WA   | 2019 |
| ExoPAG 19, AAS 233, Seattle, WA   | 2019 |
| University of Delaware Astronomy & Space Physics Seminar, Newark, DE        | 2018 |
| 11th Meeting on Cosmic Dust, Sagamihara, Japan                              | 2018 |
| Carnegie DTM Colloquium, Washington, D.C.                                   | 2018 |
| University of Maryland Astronomy Colloquium, College Park, MD               | 2018 |
| AMNH Astrophysics Seminar, New York, NY                                     | 2018 |
| University of Chicago Special Seminar, Chicago, IL                          | 2018 |
| STScI Exoplanet, Star and Planet Formation Seminar, Baltimore, MD           | 2018 |
| SPHEREx Synergies Workshop, Cambridge, MA                                   | 2018 |

SMA Special Session, AAS 231, Washington, D.C.	2018
Caltech Astronomy Colloquium, Pasadena, CA	2017
Berkeley CIPS Seminar, Berkeley, CA	2016
NASA Goddard Exoplanet Seminar, Greenbelt, MD	2016
Carnegie DTM Friday Seminar, Washington, D.C.	2016
NOAO Friday Lunch Talk, Tucson, AZ	2016
NRAO TUNA Lunch Talk, Charlottesville, VA	2016
MIT Planetary Lunch Colloquium, Cambridge, MA	2016
CfA Stars & Planets Seminar, Cambridge, MA	2016
Boston University Lunch Talk, Boston, MA	2016
NASA Far-IR SIG Meeting, 227th AAS Meeting, Kissimmee, FL	2016
SMA Science Meeting, Cambridge, MA	2015
Banneker Institute CASA Seminar, Cambridge, MA	2015
SMA Lunch Talk, Hilo, Hawaii	2015
NRAO Lunch Talk, Socorro, NM	2014
Swinburne University Colloquium, Melbourne, Australia	2014

CONFERENCE  
CONTRIBUTIONS

24. *Connecting Structure in Edge-On Debris Disks to Planetary Systems* (poster)  
Gordon Research Conference: Origins of Solar Systems, 2019, South Hadley, MA
23. *Connecting Structure in Edge-On Debris Disks to Planetary Systems* (talk)  
New Horizons in Planetary Systems, 2019, Victoria, BC, Canada
22. *Probing Planet Formation and Habitability with ALMA* (talk)  
NSF AAPF Symposium at 233rd AAS Meeting, 2019, Seattle, WA
21. *A Gap in the HD 15115 Debris Disk Detected with ALMA* (talk)  
233rd American Astronomical Society Meeting, 2019, Seattle, WA
20. *Extended Millimeter Halos in the HD 32297 and HD 61005 Debris Disks* (talk)  
7th National Capital Area Disks Meeting, 2019, Baltimore, MD
19. *Detection of a Millimeter Flare from Proxima Centauri* (plenary talk)  
Cool Stars 20, 2018, Boston, MA
18. *Detection of a Millimeter Flare from Proxima Centauri* (talk)  
ChExo Meeting, 2018, Washington, D.C.
17. *Debris Disk Grain Size Distributions from Millimeter Observations* (talk)  
Berkeley CIPS Workshop, 2018, Berkeley, CA
16. *New ALMA Images of the HD 32297 and HD 61005 Debris Disks* (poster)  
Star and Planet Formation in the Southwest 2, 2018, Tucson, AZ
15. *Debris Disk as Probes of Planetary System Formation* (talk)  
NSF AAPF Symposium at 231st AAS Meeting, 2018, Washington, DC
14. *New ALMA Images of the HD 32297 and HD 61005 Debris Disks* (talk)  
231st American Astronomical Society Meeting, 2018, Washington, DC
13. *A Complete ALMA Map of the Fomalhaut Debris Disk* (talk)  
Gordon Research Seminar: Origins of Solar Systems, 2017, South Hadley, MA
12. *A Complete ALMA Map of the Fomalhaut Debris Disk* (poster)  
Gordon Research Conference: Origins of Solar Systems, 2017, South Hadley, MA
11. *Millimeter Studies of Nearby Debris Disks* (dissertation talk)  
229th American Astronomical Society Meeting, 2017, Grapevine, TX
10. *ALMA Observations of the GQ Lup System* (talk)  
'Resolving planet formation in the era of ALMA', 2016, Santiago, Chile
9. *Constraining Collisional Models of Planetesimals in Debris Disks* (talk)  
227th American Astronomical Society Meeting, 2016, Kissimmee, FL
8. *Constraining Collisional Models of Planetesimals in Debris Disks* (poster)  
Gordon Conference: Origins of Solar Systems, 2015, South Hadley, MA

7. *A New Millimeter Look at the HD 15115 Debris Disk* (poster)  
224th American Astronomical Society Meeting, 2014, Boston, MA
6. *A New Millimeter Look at the HD 15115 Debris Disk* (poster)  
SMA: First Decade of Discovery, 2014, Cambridge, MA
5. *A Resolved Millimeter Emission Belt in the AU Mic Debris Disk* (talk)  
Formation and Evolution of Planetary Systems, 2013, Victoria, BC, Canada
4. *Millimeter Emission Structure in the AU Mic Debris Disk* (talk)  
ALMA Rocks! Transformational Science with ALMA, 2013, Kona, Hawaii
3. *Measuring CMB Temperature with an Inexpensive, Student Lab Experiment* (talk)  
USNC-URSI National Radio Science Meeting, 2012, Boulder, CO
2. *Densitometry and Thermometry of Starburst Galaxies* (poster)  
217th American Astronomical Society Meeting, 2011, Seattle, WA
1. *Variations of Physical Conditions in the Cores of Molecular Clouds as Probed by  $J_0-J_{-1}$  Methanol Lines at 157 GHz* (poster)  
215th American Astronomical Society Meeting, 2010, Washington, DC

## ADVISING

### University of Colorado Boulder

- Anna Estes (undergrad) 2020-present
- Hannah Armstrong (undergrad) 2020-present

### Carnegie DTM

- Jackson Fuson (undergrad, University of California Irvine) 2019
- Bella Marku (undergrad, Virginia Tech) 2019
- Lara Stroud (high school student) 2019
- Samantha O'Sullivan (undergrad, Harvard University) 2018

### Harvard University – Banneker Institute

- Elizabeth Gutierrez (undergrad, University of Texas at Austin) 2017
- Rachel Gilchrist (undergrad, Harvard University) 2016

## TEACHING

### University of Colorado Boulder - Lead Instructor

ASTR/GEO 2040- The Search for Life in the Universe Spring 2020

### Harvard University - Teaching Fellow

Astro. 201b - The Physics and Chemistry of the Interstellar Medium Spring 2015  
 Astro. 17 - Galactic and Extragalactic Astronomy Fall 2012  
 Astro. 16 - Stellar and Planetary Astronomy Spring 2012

## PROFESSIONAL SERVICE

CU Boulder Undergraduate Curriculum and Concerns Committee (2020 – present)  
 HIRMES Workshop SOC (2020 – present)  
 Carnegie Institution Postdoctoral Association (CIPA) elected representative (2018 – 2020)  
 DTM Astronomy Seminar Organizer (2018 – 2020)  
 7th National Capital Area Disks Meeting SOC (2018)  
 NSF AAPF Symposium Organizer (for 2019)  
 Gordon Research Seminar Origins of Solar Systems Chair (elected 2017 for 2019 conference)  
 NASA Review Panels (multiple programs), external and in-house reviewer (2017 – present)  
 Origins Space Telescope Disks and Planet Formation Working Group (2017 – present)  
 Member of NASA IR SIG Leadership Council (2016 – present, Co-Chair 2020 – present)  
 Member of ALMA Time-domain Special Interest Group (2016 – present)  
 Referee for MNRAS (2016 – present), ApJ (2017 – present), Nature (2018 – present)  
 Local organizing committee for APS CUWiP at Harvard (2015 – 2017)  
 Judge for Chambliss student poster award at AAS (2015 – present)  
 Astronomy graduate retreat committee (2014 – 2015)

Mentor to first-year Harvard graduate students (2014 – 2015)  
Organizer of Harvard graduate prospective weekend (2013)  
Mentor to Harvard undergraduate women in science (2011 – 2014)

## OUTREACH

### **First Light - Carnegie Academy for Science Education** 2018 – present

- Wrote an astronomy curriculum to be taught in three parts: (1) What is space? (2) Are there other planets like Earth? (3) How can we travel in space?
- Led teaching of this astronomy curriculum during the 2018-2019 academic year
- Designed new hands-on activities and instructed local teachers on how to incorporate them into their classrooms
- Led teacher training workshops through KIPP DC to share curricular materials
- Participated in multiple DC area STEM fairs

### **WorldWide Telescope Ambassador** 2013 – present

- Designed an interactive kiosk for the Harvard Science Center to introduce students and the public to astronomy at Harvard
- Taught new curricula to students Cambridge and Lexington, MA
- Participated in outreach events including the U.S. Science and Engineering Festival

### **Nonresident tutor in Pforzheimer House** 2014 – 2017

- Organized weekly problem help sessions for Harvard undergraduate students taking physics and astronomy courses

### **Cambridge Science Festival Volunteer** 2012 – 2017

- Presented astronomy to the public at the yearly event in Cambridge, MA

### **The Scientista Foundation Boston Regional Officer** 2011 – 2013

- Organized networking events for women scientists in the Boston area

### **Science Club for Girls Mentor** 2009 – 2014

- Led an after-school science program for K-6 girls at the Amigos School in Cambridge, MA
- Founded a Harvard Chapter of the organization and helped recruit new volunteers

## REFEREED

### PUBLICATIONS

11 First Author  
3 Second Author  
10 Co-Author  
24 Total

*First Author:*

11. *Properties of M Dwarf Flares at Millimeter Wavelengths*  
**M. A. MacGregor**, R. A. Osten, A. M. Hughes  
Accepted to *Astrophysical Journal*, 2020 (arXiv:2001.10546)
10. *Multiple Rings of Millimeter Dust Emission in the HD 15115 Debris Disk*  
**M. A. MacGregor**, A. J. Weinberger, E. R. Nesvold, A. M. Hughes, D. J. Wilner, T. Currie, J. H. Debes, J. K. Donaldson, S. Redfield, A. Roberge, G. Schneider  
*Astrophysical Journal Letters*, 877, L32, 2019 (arXiv:1905.08258)
9. *ALMA Detection of Extended Millimeter Halos in the HD 32297 and HD 61005 Debris Disks*  
**M. A. MacGregor**, A. J. Weinberger, A. M. Hughes, D. J. Wilner, T. Currie, J. H. Debes, J. K. Donaldson, S. Redfield, A. Roberge, G. Schneider  
*Astrophysical Journal*, 869, 75, 2018 (arXiv:1812.05610)
8. *Detection of a Millimeter Flare From Proxima Centauri*  
**M. A. MacGregor**, A. J. Weinberger, D. J. Wilner, A. F. Kowalski, S. R. Cranmer  
*Astrophysical Journal Letters*, 855, L2, 2018 (arXiv:1802.08257)
7. *A Complete ALMA Map of the Fomalhaut Debris Disk*  
**M. A. MacGregor**, L. Matrà, P. Kalas, D. J. Wilner, M. Pan, G. M. Kennedy, M.C. Wyatt, G. Duchene, A. M. Hughes, G. H. Rieke, M. Clampin, M. P. Fitzgerald, J. R. Graham, W. S. Holland, O. Panić, A. Shannon, K. Y. L. Su  
*Astrophysical Journal*, 842, 8, 2017 (arXiv:1705.05867)

6. *ALMA Measurements of Circumstellar Material in the GQ Lup System*  
**M. A. MacGregor**, D. J. Wilner, I. Czekala, S. M. Andrews, Y. S. Dai, G. J. Herczeg, K. M. Kratter, A. L. Kraus, L. Ricci, L. Testi  
 Astrophysical Journal, 835, 17, 2017 (arXiv:1611.06229)
5. *ALMA Observations of the Debris Disk of Solar Analogue Tau Ceti*  
**M. A. MacGregor**, S. M. Lawler, D. J. Wilner, B. C. Matthews, G. M. Kennedy, M. Booth, J. Di Francesco  
 Astrophysical Journal, 828, 113, 2016 (arXiv:1607.02513)
4. *Constraints on Planetesimal Collision Models in Debris Disks*  
**M. A. MacGregor**, D. J. Wilner, C. Chandler, L. Ricci, S. T. Maddison, S. R. Cranmer, S. M. Andrews, A. M. Hughes, A. Steele  
 Astrophysical Journal, 823, 79, 2016 (arXiv:1603.05644)
3. *The Epsilon Eridani System Resolved by Millimeter Interferometry*  
**M. A. MacGregor**, D. J. Wilner, S. M. Andrews, J.-F. Lestrade, S. Maddison  
 Astrophysical Journal, 809, 47, 2015 (arXiv:1507.01642)
2. *Resolved Millimeter Emission from the HD 15115 Debris Disk*  
**M. A. MacGregor**, D. J. Wilner, S. M. Andrews, A. M. Hughes  
 Astrophysical Journal, 801, 59, 2015 (arXiv:1501.05962)
1. *Millimeter Emission Structure in the First ALMA Image of the AU Mic Debris Disk*  
**M. A. MacGregor**, D. J. Wilner, K. A. Rosenfeld, S. M. Andrews, B. Matthews, A. M. Hughes, M. Booth, E. Chiang, J. R. Graham, P. Kalas, G. Kennedy, B. Sibthorpe  
 Astrophysical Journal Letters, 762, L21, 2013 (arXiv:1211.5148)

*Second Author and Co-Author:*

13. *The REASONS Survey: Resolved Millimeter Observations of a Large Debris Disk Around the Nearby F Star HD 17077*  
 A. G. Sepulveda, L. Matrà, G. M. Kennedy, C. del Burgo, K. I. Oberg, D. J. Wilner, S. Marino, M. Booth, J. M. Carpenter, C. L. Davies, W. R. F. Dent, S. Ertel, J.-F. Lestrade, J. P. Marshall, J. Milli, M. C. Wyatt, **M. A. MacGregor**, B. C. Matthews  
 Accepted to ApJ, 2019 (arXiv:1906.08797)
12. *Review: Far-Infrared Instrumentation and Technology Development for the Next Decade*  
 D. Farrah, and 34 co-authors including **M. MacGregor**  
 Journal of Astronomical Telescopes, Instruments, and Systems, 5(2), 1, 2019  
 (arXiv:1709.02389)
11. *Deep ALMA Search for CO Gas in the HD 95086 Debris Disc*  
 M. Booth, L. Matrà, K. Y. L. Su, Q. Kral, A. S. Hales, W. R. F. Dent, A. M. Hughes, **M. A. MacGregor**, T. Löhne, D. J. Wilner  
 Monthly Notices of the Royal Astronomical Society, 482, 3443, 2018 (arXiv:1811.00412)
10. *Resolved Millimeter Observations of the HR 8799 Debris Disk*  
 D. J. Wilner, **M. A. MacGregor**, S. M. Andrews, A. M. Hughes, B. C. Matthews, K. Y. L. Su  
 Astrophysical Journal, 855, 56, 2018 (arXiv:1803.00054)
9. *ALMA and VLA Observations of the HD 141569 System*  
 J. A. White, A. C. Boley, **M. A. MacGregor**, A. M. Hughes, D. J. Wilner  
 Monthly Notices of the Royal Astronomical Society, 474, 4500, 2018 (arXiv:1711.07489)

8. *ALMA 1.3 Millimeter Map of the HD 95086 System*  
K. Y. L. Su, **M. A. MacGregor**, M. Booth, D. J. Wilner, K. Flaherty, A. M. Hughes, N. M. Phillips, R. Malhotra, A. S. Hales, S. Morrison, S. Ertel, B. C. Matthews, W. R. F. Dent, S. Casassus  
Astronomical Journal, 154, 225, 2017 (arXiv:1709.10129)
  7. *Detection of exocometary CO within the 440 Myr-old Fomalhaut belt: a similar CO+CO<sub>2</sub> ice abundance in exocomets and Solar System comets*  
L. Matrà, **M. A. MacGregor**, P. Kalas, M. C. Wyatt, G. M. Kennedy, D. J. Wilner, G. Duchene, A. M. Hughes, M. Pan, A. Shannon, M. Clampin, M. P. Fitzgerald, J. R. Graham, W. S. Holland, O. Panić, K. Y. L. Su  
Astrophysical Journal, 842, 9, 2017 (arXiv:1705.05868)
  6. *A Multi-Ringed, Modestly-Inclined Protoplanetary Disk Around AA Tau*  
R. A. Loomis, K. I. Öberg, S. M. Andrews, **M. A. MacGregor**  
Astrophysical Journal, 840, 23, 2017 (arXiv:1704.02006)
  5. *An ATCA survey of debris disks at 7 millimeters*  
L. Ricci, S. T. Maddison, D. Wilner, **M. A. MacGregor**, C. Ubach, J. M. Carpenter, L. Testi  
Astrophysical Journal, 813, 138, 2015 (arXiv:1510.03513)
  4. *The AU Mic Debris Disk: Far-infrared and Submillimeter Resolved Imaging*  
B. C. Matthews, and 22 co-authors including **M. MacGregor**  
Astrophysical Journal, 811, 100, 2015 (arXiv:1509.06415)
  3. *Ammonia Thermometry of Star-Forming Galaxies*  
J. G. Mangum, J. Darling, C. Henkel, K. M. Menten, **M. MacGregor**, B. E. Svoboda, E. Schinnerer  
Astrophysical Journal, 779, 33, 2013 (arXiv:1310.6586)
  2. *Constraining a Model of Turbulent Coronal Heating for AU Microscopii with X-Ray, Radio, and Millimeter Observations*  
S. R. Cranmer, D. J. Wilner, **M. A. MacGregor**  
Astrophysical Journal, 772, 149, 2013 (arXiv:1306.4567)
  1. *A Resolved Millimeter Emission Belt in the AU Mic Debris Disk*  
D. J. Wilner, S. M. Andrews, **M. A. MacGregor**, A. M. Hughes  
Astrophysical Journal Letters, 749, L27, 2013 (arXiv:1203.1896)
- UNREFEREED PUBLICATIONS
7. *Advancing Understanding of Star-Planet Ecosystems in the Next Decade: The Radio Wavelength Perspective*  
R. Osten, and 15 co-authors including **M. MacGregor**  
Submitted to Astro2020 Decadal Survey, BAAS, 51, 434, 2019
  6. *Probing Unseen Planet Populations with Resolved Debris Disk Structures*  
K. Su, and 12 co-authors including **M. MacGregor**  
Submitted to Astro2020 Decadal Survey, BAAS, 51, 419, 2019
  5. *Modeling Debris Disk Evolution*  
A. Gaspar, and 45 co-authors including **M. MacGregor**  
Submitted to Astro2020 Decadal Survey, BAAS, 51, 69, 2019
  4. *Science Impacts of the SPHEREx All-Sky Optical to Near-Infrared Spectral Survey II: Report of a Community Workshop on the Scientific Synergies Between the SPHEREx Survey and Other Astronomy Observatories*  
O. Doré, and 62 co-authors including **M. MacGregor**  
Available on arXiv, 2018 (arXiv:1805.05489)



3. *Enabling New ALMA Science with Improved Support for Time-Domain Observations*  
Corresponding author P. K. G. Williams, and 37 co-authors including **M. MacGregor**  
Submitted to ALMA Science Advisory Council, 2017 (arXiv:1703.04692)
2. *A Resolved Millimeter Emission Belt in the AU Mic Debris Disk*  
**M. A. MacGregor**  
Exploring the Formation and Evolution of Planetary Systems, Proceedings of the  
International Astronomical Union, IAU Symposium, 299, 313, 2014
1. *Densitometry and Thermometry of Starburst Galaxies*  
J. G. Mangum, J. Darling, K. M. Menten, C. Henkel, **M. MacGregor**  
EAS Publication Series, 52, 71, 2011 (arXiv:1102.1395)