Laura Lenkić

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Research Interests

- Properties of multi−phase ISM in nearby galaxies
- Structure and dynamics of star forming clumps in nearby galaxies
- Radio and infrared emission lines in nearby galaxies
- Cosmic evolution of gas and star formation in galaxies

Education

Aug 2021 (anticipated)	**Ph.D. in Astronomy** Thesis: *Characterizing Molecular Gas Content and Properties in Galaxies at the Peak of Cosmic Star Forming Activity* Advisor: Dr. Alberto Bolatto	University of Maryland College Park, MD
Aug 2016	**M.Sc. in Astronomy** Thesis: *The Ultraviolet and Infrared Star Formation Rates of Compact Group Galaxies: An Expanded Sample* Advisor: Dr. Sarah Gallagher	Western University London, ON
Aug 2014	**B.Sc. in Physics** Minor in Advanced Physics Thesis: *The Ultraviolet Star Formation Rates of Compact Group Galaxies* Advisor: Dr. Sarah Gallagher	Western University London, ON

Observational Experience

ALMA	**PI**	Cycle 7	*Confirming Serendipitous High-z Sources in the PHIBSS2 Fields* Awarded: 8.7 hours
	Co-I	Cycle 7	*Ionized Gas, Radiation Field, Masses, and Dust Temperature in Forming Massive Clusters in the NGC253 Starburst* PI: R. Levy
	Co-I	Cycle 7	*A Representative Interferometric Survey of Galaxies in the z=0 Universe with Full IFU Spectroscopic Coverage: EDGE* PI: A. Bolatto
	Co-I	Cycle 7	*ACA Mapping of the Largest Supergiant HII Region in the Nearby Universe: 30 Doradus* PI: A. Bolatto
	Co-I	Cycle 6	*Ionized Gas, Radiation Field, Masses, and Dust Temperature in Forming Massive Clusters in the NGC253 Starburst* PI: A. Bolatto

GBT	Co-I	2021B Semester (in review)	*GBT EDGE: A Representative Survey of the z=0 Universe with Full IFU Spectroscopy* PI: A. Bolatto
JWST	**PI**	Cycle 1 (in review)	*Ionized Gas Outflows from Star Forming Clumps in the Nearby, Turbulent Galaxy: DYNAMO D13-5*
	Co-I	Cycle 1 (in review)	*Searching for the Smallest Dust Grains in the Extremely Low Metallicity Dwarf Galaxy Leo P* PI: E. Tarantino
	Co-I	Cycle 1 (in review)	*Dissecting the Prototypical Starbursts NGC 253 and M 82 and Their Cool Galactic Winds* PI: A. Bolatto
NOEMA	**PI**	Winter19	*Confirming Serendipitous High-z Sources in the PHIBSS2 Fields* Awarded: 6.0 hours
SOFIA	**PI**	Cycle 8 & 9	*Local Analogues of Turbulent, Clumpy, Main-Sequence Galaxies at the Peak of Cosmic Star Formation* Awarded: 17.1 hours and $171,000
	Co-I	Cycle 9	*SOFIA GREAT Mapping of the LMC Northern Molecular Ridge* PI: A. Bolatto

Scientific Presentations

April 2021	Ringberg Workshop on "How does small-scale physics drive galaxy evolution?" *Gas and Star Formation at the Peak of Cosmic Star Forming Activity*	Virtual
February 2021	Space Telescope Science Institute Galaxy Journal Club *Gas and Star Formation at the Peak of Cosmic Star Forming Activity*	Virtual
January 2021	The 237$^{\text{th}}$ Meeting of the American Astronomical Society Dissertation Talk: *Gas and Star Formation at the Peak of Cosmic Star Forming Activity*	Virtual
June 2020	EAS2020 Annual Meeting Poster: *Constraints on the Molecular Gas Mass Density Evolution over Cosmic Time from Serendipitous CO Detections in PHIBSS2*	Virtual
June 2019	Radio/Millimeter Astrophysical Frontiers in the Next Decade Talk: *Constraints on the Molecular Gas Mass Density Evolution over Cosmic Time from Serendipitous CO Detections in PHIBSS2*	Charlottesville, VA
November 2018	ISM Group Lunch Talk at Goddard Space Flight Center Talk: *Results from a CO Line Search in the Plateau de Bure High-z Blue Sequence Survey Data*	Greenbelt, MD
September 2018	Lunch Talk at the National Science Foundation Talk: *Results from a CO Line Search in the Plateau de Bure High-z Blue Sequence Survey Data*	Alexandria, VA
June 2018	Astrophysical Frontiers in the Next Decade and Beyond: Planets, Galaxies, Black Holes, and the Transient Universe Talk: *Results from a CO Line Search in the Plateau de Bure High-z Blue Sequence Survey Data*	Portland, OR

May 2015	Canadian Astronomical Society (CASCA) Annual Meeting Talk: *Star Formation and Galaxy Evolution in Compact Groups of Galaxies*	Hamilton, ON
July 2014	Compact Group Research Team Meeting Talk: *UV and 24 μm Results for the Swift Expanded Sample − The Final Cut*	London, ON
July 2013	Compact Group Research Team Meeting Talk: *UV and 24 μm Results for the Swift Expanded Sample*	Charlottesville, VA
July 2012	Compact Group Research Team Meeting Talk: *Reconstructing the Redshift Survey Compact Group Catalog*	Charlottesville, VA

Honors and Awards

2016	Gregor and Donat Wentzel Scholarship Awarded by the Graduate Entrance Committee to the most promising applicants for graduate study.	University of Maryland Dept. of Astronomy
2016	IMPRS Studentship − Declined ESO is one of the partners in the IMPRS (International Max−Planck Research School) on Astrophysics and offers in Garching two full (3 years) Ph.D. positions every year.	ESO
2015−2016	Ontario Graduate Scholarship − Honorable Mention The Ontario Graduate Scholarship (OGS) program encourages excellence in graduate studies at publicly-assisted universities in Ontario. Since 1975, the OGS program has been providing merit-based scholarships to Ontario's best graduate students in all disciplines of academic study.	Western University
2014	Western Graduate Scholarship	Western University
2013−2014	Dean's Honor List	Western University
2009−2010	Nortel Networks Excellence in Computer Science − Declined Awarded annually to a full-time undergraduate student entering first year of the science program who intends to register in the Honors Computer Science program in year 2 and who achieves a 90% admission average.	Western University

Professional Experience and Workshops

Mar 2021	Science Talk '21	Virtual
Feb 2021	AAAS Annual Meeting	Virtual
Feb 2021	MacSciComm2: Experimenting with SciComm	Virtual
Jan 2021	Ramon International SciComm Conference	Virtual
Jan 2021	MacSciComm1: Engaging Broad Audiences	Virtual
Mar 2019	ALMA Proposal Workshop	University of Maryland
May 2018	SOFIA Guest Observer	Palmdale, CA
May 2017	SOFIA Proposal Workshop	University of Maryland
July 2016	Scientific Collaboration Visit	Goddard Space Flight Center
Dec 2015	Canada and the Square Kilometre Array	Toronto, ON
Aug 2015	ALMA Summer School on Interferometric Techniques	DRAO
May 2015	Statistics in Astronomy	Hamilton, ON
Aug 2014	Computing Skills Bootcamp	Western University
Aug 2012	Scientific Collaboration Visit	Goddard Space Flight Center

Professional Service

2021	Referee for ApJ	
2019−present	UMD Astronomy Department's Graduate Student Council President	University of Maryland
2015	Great Lakes Quasar Symposium − Local Organizing Committee	Western University
2014−2016	Graduate Student Council Member	Western University
2014	Collaboration Meeting Organizing Committee	Western University
2013−2014	President of Physics & Astronomy Student Association	Western University
2012−2013	Vice President of Physics & Astronomy Student Association	Western University

Teaching Experience

Spring 2021

Field Assistant for Eyes on the Sky: The Science of Birdwatching
University of Maryland, College Park
Honors course, Dr. Derek Richardson

Fall 2020

Teaching Assistant for The Threat of Asteroid Impacts
University of Maryland, College Park
Non-astronomy major course, Dr. Jessica Sunshine

Spring 2020

Teaching and Lab Assistant for Introduction to Astronomy
University of Maryland, College Park
Non-science major course, Dr. Alberto Bolatto

Field Assistant for Eyes on the Sky: The Science of Birdwatching
University of Maryland, College Park
Honors course, Dr. Derek Richardson

Fall 2019

Teaching Assistant for General Astronomy
University of Maryland, College Park
Non-science major course, Dr. Drake Deming

Winter 2016

Teaching and Lab Assistant for Introductory Physics I
Western University, London
B.Sc. course, Dr. Kanthi Kaluarachchi

Teaching Assistant for Exploring the Stars
Hume Cronyn Memorial Observatory, Western University, London
Community Outreach Program, Dr. Margaret Campbell-Brown

Fall 2015

Teaching Assistant for Physics for Engineering Students I
Western University, London
B.Eng. course, Dr. Silvia Mittler

Teaching Assistant for General Astronomy
Western University, London
B.Sc. course, Dr. Jan Cami

Teaching Assistant for Exploring the Stars
Hume Cronyn Memorial Observatory, Western University, London
Community Outreach Program, Dr. Margaret Campbell-Brown

Summer 2015

Teaching Assistant for Essentials of Modern Astronomy
Western University, London
B.Sc. course, Dr. Elizabeth A. Silber

2014−2015

Teaching and Lab Assistant for Introductory Physics I
Western University, London
B.Sc. course, Dr. Kanthi Kaluarachchi

2011−2013 **Private Tutor**
London, ON
Grade 11 and 12 Applied Mathematics, Calculus, Physics, and Chemistry

Equity, Diversity, and Inclusion Activities

2020 **GRAD-MAP Winter Workshop Volunteer and Guest Lecturer** University of Maryland
• Prepared `Python` Jupyter notebooks for students and instructors covering image processing basics, exercises, and introduction to `scikit-image`.
• Led an internship application workshop with case studies and writing exercises.
• Worked with students before their final presentations to help them finish their work, prepare their presentations, and practice their talks.
• Chaperoned students to the National Museum of African American History and Culture and other social activities.
• Engaged with students outside of regularly scheduled workshop activities to talk about research and life in graduate school.

2017−2020 **Equity, Diversity, and Inclusion Committee Member** University of Maryland
• Advocated for the removal of the physics GRE requirement for graduate school applications.
• Re-wrote the section of the graduate handbook outlining the purpose, procedure, and timeline of the second year project, for clarity and accessibility. This included advocating for a revision of the second year project to implement additional elements to better monitor student progress and success.
• Authored a document that is now circulated to the whole department every semester to encourage a normalization of conversations for time away from work for graduate students, and the importance of this for mental health.
• Advocated for, and worked with the department chair and graduate director, to implement a survey for teaching assistants where they may report on the time they spend on teaching, and the type of duties they are responsible for. The goal is to assess the work load of each course, and use that information to evenly distribute work loads among teaching assistants.
• Helped compile and distribute resources for learning about anti-Black racism that have been distributed to the whole department.

2017−2018 **Junior Leader of Astronomy Gentleladies' Network** University of Maryland
• Organized and hosted monthly meetings for women in physics and astronomy to discuss and learn about topics such as impostor syndrome, the physics GRE and graduate school applications, and how to have crucial diversity conversations.
• Hosted workshops in partnership with the campus health center to talk about mental health in academia, and sexual harassment. In addition, I hosted and organized workshops on goal setting and public outreach.
• Organized and hosted speakers from the Space Telescope Science Institute, and NASA Goddard Space Flight Center to learn about science communication and careers at NASA.
• Participated in organizing a mentoring program for women in physics and astronomy. The program was aimed at graduate student mentoring of undergraduate students.
• Organized and hosted bi-weekly tea times to serve as a safe-space for women to socialize and freely discuss experiences, feelings, and thoughts.

Outreach Experience

2020 Skype a Scientist Volunteer Virtual
2016 Organizing Member of Transit of Mercury Public Event Western University

2016	Public Night Speaker Talk: *Small Bodies in the Solar System*	Hume Cronyn Memorial Observatory
2015	Public Night Speaker Talk: *Ground Based Telescopes (but really) A Look at Radio Telescopes*	Hume Cronyn Memorial Observatory
2015	Public Night Speaker Talk: *The Perseid Meteor Shower; Plus: The Russian Meteor of February 2013*	Hume Cronyn Memorial Observatory
2014−2016	Public Night Volunteer	Western University
2013	High School Visit − University Recruitment Talk	Saunders High School
2012	Organizing Member for Transit of Venus Public Event	Western University
2011−2013	Fall Preview Day Volunteer	Western University

List of Publications

Link to current publications in ADS
Total Citations: 22 — h−index: 3

Refereed Publications

1. Girard, M., Fisher, D.B., Bolatto, A.D., et al. (accepted)
   Systematic difference between ionized and molecular gas velocity dispersion in $z \sim 1-2$ disks and local analogues

2. **Lenkić, L.,** Bolatto, A.D., Förster Schreiber, N.M., et al. 2020, AJ, 159, 190
   Plateau de Bure High-z Blue Sequence Survey 2 (PHIBSS2): Search for Secondary Sources, CO Luminosity Functions in the Field, and the Evolution of Molecular Gas Density through Cosmic Time

3. **Lenkić, L.,** Tzanavaris, P., Gallagher, S.C., et al. 2016, MNRAS, 459, 2948
   The Ultraviolet and Infrared Star Formation Rates of Compact Group Galaxies: An Expanded Sample

4. Tzanavaris, P., Hornschemeier, A.E., Gallagher, S.C., **Lenkić, L.,** et al. 2016, ApJ, 817, 95
   Exploring X-Ray Binary Populations in Compact Group Galaxies with Chandra

Publications in Preparation

1. Levy, R.C., Bolatto, A.D., Leroy, A.K., et al. (in review)
   Outflows from Super Star Clusters in the Central Starburst of NGC 253

2. **Lenkić, L.,** Bolatto, A.D., Fisher, D.B., et al. in prep (to be submitted < 2 month)
   Giant Star Forming Complexes in High-z Main Sequence Galaxy Analogues: The Internal Structure of Clumps in DYNAMO Galaxies

3. **Lenkić, L.,** Bolatto, A.D., Fisher, D.B., et al. in prep (to be submitted < 1 year)
   Resolved Kennicut-Schmidt Law in High-z Main Sequence Local Galaxy Analogues

Last updated on February 10, 2020