

SINCLAIRE M. MANNING
CURRICULUM VITAE

Department of Astronomy
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EDUCATION

The University of Texas at Austin (2015 - 2021)
Ph.D. in Astronomy, Awarded August 2021
Department of Astronomy, Advisor: Prof. Caitlin Casey
Howard University, Washington, D.C. (2010 - 2015)
B.S. in Physics, *magna cum laude*, May 2015
B.A. in Spanish, *magna cum laude*, May 2015

PROFESSIONAL APPOINTMENTS

NASA Hubble Postdoctoral Fellow, UMass Amherst (2021 -)
Graduate Research Assistant, UT Austin (2015 - 2016, 2019 - 2021)
NSF Graduate Research Fellow, UT Austin (2016 - 2019)
Undergraduate Research Assistant, University of Wisconsin - Madison (Jun-Aug 2014)
Summer Student Research Assistant, NRAO Charlottesville, VA (Jun-Aug 2012, 2013)

RESEARCH INTERESTS

Observational galaxy formation and evolution, including: dusty star-forming galaxies (DSFGs), optically/near-infrared dark DSFGs, (sub)millimeter observations, multiwavelength galaxy morphologies, dust content, mergers, AGN fraction.

FELLOWSHIPS, GRANTS, AWARDS, & HONORS

ALMA Ambassador Program, NRAO (2022)
\$10,000 Supports independent research and hosting of ALMA proposal workshop.
NASA Hubble Fellowship Program, STScI (2021)
\$270,000 Postdoctoral fellowship awarded over three years.
Student Observing Support (SOS) program, NRAO (2020)
\$18,000 Supplemental funding for ALMA Cycles 6 and 7.
Graduate Research Opportunities Worldwide (GROW), NSF (2019)
\$5,000 Travel grant to work as a visiting PhD student at DAWN in Copenhagen, Denmark.
Hubble Space Telescope General Observer Grant, Cycle 27, NASA (2019)
\$126,813, Co-I, PI: Casey **UT Graduate School Professional Development Award** (2019)
\$600 Travel support to attend ISEE PDP workshops.
Fred Goetting Memorial Endowed Presidential Scholarship, UT Austin (2018)

\$10,000 Recognizing a graduate student for outstanding service to the department.
Beth Brown Award for Outstanding Oral Presentation in Astronomy (2018)
Honorably Mention, National Society of Black Physicists (NSBP.)
Graduate Research Fellow, National Science Foundation (2016-2019)
\$102,000 Graduate fellowship awarded over three years.

TELESCOPE TIME AWARDED

LMT, *Ultra-Distant, Dusty, or Dead? Breaking the Degeneracy with LMT/TolTEC Observations*, ~4 h (2022)
HET, *Spectroscopic confirmation of μ Jy radio sources in SuperCLASS*, ~30 h (2017)

As Co-I:

JWST, *COSMOS-Web: A Webb Cosmic Origins Survey*, ~225 h (2021)
HST, *Rest-frame UV/optical Morphologies of Obscured Radio Starbursts*, ~10 h (2019)
ALMA, *Obscuration to Reionization: A Blank-Field 2 mm Deep Survey in COSMOS*, ~50 h (2018)
ALMA, *The nature of 3 mm-selected sources: the highest redshift dusty star-forming galaxies?*, ~19 h (2018)

Observational Experience: 5 nights observing at the James Clerk Maxwell Telescope.

COLLOQUIA AND INVITED TALKS

- Texas A&M University, *invited seminar* (Oct. 2022)
- University of Wisconsin Madison Dept. of Astronomy, *invited seminar* (May 2022)
- UMass Amherst Dept. of Astronomy, *colloquium* (Apr. 2022)
- University of Connecticut Dept. of Physics, *invited seminar* (Apr. 2022)
- Boston University Dept. of Astronomy, *colloquium* (Mar. 2022)
- UC Irvine Astrophysics Seminar (Virtual), *invited seminar* (Jan. 2021)
- JILA/CU Boulder Astrophysics Seminar (Virtual), *invited seminar* (Oct. 2020)
- Syracuse University Dept. of Physics (Virtual), *colloquium* (Oct. 2020)
- NRAO, Charlottesville, VA, *TUNA Talk* (2016)

PROFESSIONAL SERVICE

Service to Scientific Community

Panel Reviews:

- LMT, 2023-S1 TAC (2022)
- HST, Cycle 30 TAC (2021)

Proposal Review for ALMA distributed reviews Cycles 8+9

Service to UMass Community

FCAD Colloquium Organizing Committee (2022-)

TEACHING AND MENTORING

Guest Lecturer:

- ASTRO 301: Writing About Astronomy (Fall 2022, UMass)

- ASTRO 111: Introduction to Astronomy (Fall 2022, Smith College)
- ASTRO 100: Exploring the Universe (Spring 2022, UMass)

Training:

- Institute for Scientist and Engineer Educators (2018-2019)
Professional Development Program (ISEE PDP), UCSC
- NAC VII Organizing Committee (2020)
- Graduate Student Mentor for Undergraduates, GUMMY Program, UT Austin (2019-2020)
- Seminar Coordinator for TAURUS Program, UT Austin (2016-2020)
- Graduate Student Mentor for TAURUS, UT Austin (2016-2020)
- NAC Peer Mentor (2015-2021)

PUBLIC OUTREACH

- Eureka! Workshop, UMass Amherst (2022)
- Astronomy on Tap State College, Guest Speaker (Virtual) (2020)
- Austin Astronomical Society, Guest Speaker (Austin, TX) (2019)
- Astronomy on Tap ATX, Guest Speaker (Austin, TX) (2019)
- AUSPREP Career Awareness Seminar, Guest Speaker (Austin, TX) (2017)
- Astronomy on Tap ATX, Guest Speaker (Austin, TX) (2017)
- Girl Day at UT Austin, Volunteer (Austin, TX) (2016-2017)
- NAC IV Meeting, Alumni Voices Speaker (Washington, D.C.) (2016)

ADDITIONAL EXPERIENCE

Computing: Experience with IDL and Python

Surveys and Large Collaborations:

- JWST COSMOS-Web Survey (2021 –)
- SuperCLASS Collaboration (2015 –)

Professional Memberships:

- American Astronomical Society, Member (2016 –)
- National Society of Black Physicists, Member (2015 –)

PUBLICATIONS (2 first author, 8 co-author)

Probing Cold Gas in a Massive, Compact Star-forming Galaxy at $z = 6$

Zavala, J., Casey, C.M., Spilker, J., Tadaki, K., Tsujita, A., Champagne, J., Iono, D., Kohno, K., Manning, S.M., Montana, A., (2022), ApJ, 933, 242

Characterization of Two 2 mm-detected Optically-Obscured Dusty Star-Forming Galaxies

Manning, S.M., Casey, C.M., Zavala, J., Magdis, G.E., Drew, P.M., Champagne, J.B., Aravena, M., Béthermin, M., Clements, D.L., Finkelstein, S.L., Fujimoto, S., Hayward, C.C., Hodge, J.A., Ilbert, Kartaltepe, J.S., Knudsen, K.K., Koekemoer, A.M., Man, A.W.S., Sanders, D.B., Sheth, K., Spilker, J.S., Staguhn, J., Talia, M., Treister, E., Yun, M.S., (2022), ApJ, 925, 23

Mapping Obscuration to Reionization with ALMA (MORA): 2 mm Efficiently Selects the Highest-redshift Obscured Galaxies

Casey, C.M., Zavala, J., **Manning, S.M.**, et al., (2021), ApJ, 923, 215

The Evolution of the IR Luminosity Function and Dust-obscured Star Formation in the Last 13 Billion Years

Zavala, J., Casey, C.M., **Manning, S.M.**, Aravena, M., Bethermin, M., Caputi, K.I., Clements, D.L., da Cunha, E., Drew, P., Finkelstein, S.L., Fujimoto, S., Hayward, C., Hodge, J., Kartaltepe, J.S., Knudsen, K., Koekemoer, A.M., Long, A.S., Magdis, G.E., Man, A.W.S., Popping, G., Sanders, D., Scoville, N., Sheth, K., Staguhn, J., Toft, S., Treister, E., Vieira, J.D., Yun, M.S., (2021), ApJ, 909, 165

Physical Drivers of the Luminosity-Weighted Dust Temperatures in High-Redshift Galaxies

Burnham, A.D., Casey, C.M., Zavala, J.A., **Manning, S.M.**, Spilker, J.S., Capak, P., Chapman, S.C., Chen, C.-C., Cooray, A., Hayward, C., Sanders, D.B., Scoville, N.Z., Sheth, K., (2021), ApJ, 910, 89

SuperCLASS – II. Photometric Redshifts and Characteristics of Spatially-Resolved μ Jy Radio Sources

Manning, S.M., Casey, C.M., Hung, C.-L., Battye, R., Brown, M.L., Jackson, N., Abdalla, F., Chapman, S., Demetroullas, C., Drew, P., Hales, C.A., Harrison, I., Riseley, C.J., Sanders, D.B., Watson, R.A., (2020), MNRAS, 495, 1724

SuperCLASS – I. The Super CLuster Assisted Shear Survey: Project Overview and First Data Release

Battye, R.A., Brown, M.B., Casey, C.M., Harrison, I., Jackson, N.J., Smail, I., Watson, R.A., Hales, C.A., **Manning, S.M.**, Hung, C.-L., Riseley, C.J., Abdalla, F.B., Birkinshaw, M., Demetroullas, C., Scott, C., Beswick, R.J., Muxlow, T.W.B., Bonaldi, A., Camera, S., Hillier, T., Kay, S.T., Peters, A., Sanders, D.B., Thomas, D.B., Thomson, A.P., Turnbridge, B., Whittaker, L., (2020), MNRAS, 495, 1706

SuperCLASS - III. Weak Lensing from Radio and Optical Observations in Data Release 1

Harrison, I., Brown, M.L., Turnbridge, B., Thomas, D.B., Hillier, T., Thomson, A.P., Whittaker, L., Abdalla, F.B., Battye, R.A., Bonaldi, A., Camera, S., Casey, C.M., Demetroullas, C., Hales, C.A., Jackson, N.J., Kay, S.T., **Manning, S.M.**, Peters, A., Riseley, C.J., Watson, R.A., (2020), MNRAS, 495, 1737

Physical Characterization of an Unlensed Dusty Star-Forming Galaxy at $Z=5.85$

Casey, C.M., Zavala, J.A., Aravena, M., Béthermin, M., Caputi, K., Champagne, J.B., Clements, D.L., Da Cunha, E., Drew, P., Finkelstein, S.L., Hayward, C.C., Kartaltepe, J.S., Knudsen, K., Koekemoer, A.M., Magdis, G.E., Man, A., **Manning, S.M.**, Scoville, N.Z., Sheth, K., Spilker, J., Staguhn, J., Talia, M., Taniguchi, Y., Toft, S., Treister, E., Yun, M., (2019), ApJ, 887, 1

Massive Cluster Formation and Destruction in Luminous Infrared Galaxies in GOALS

Linden, S.T., Evans, A.S., Rich, J., Larson, K.L., Armus, L., Díaz-Santos, T., Privon, G.C., Howell, J., Inami, H., Kim, D.-C., Chien, L.-H., Vavilkin, T., Mazzarella, J.M., Modica, F., Surace, J.A., **Manning, S.M.**, Abdullah, A., Blake, A., Yarber, A., Lambert, T., (2017), ApJ, 843, 2

Posters

Lighting Up the Dark: Understanding the Hidden Nature of NIR-dark Galaxies, Mapping the

Invisible Universe, Lorentz Center Workshop, Netherlands (2022)

Radio Morphologies of Dust Obscured Starbursts in the SuperCLASS Field, IAU Symposium 352, Portugal (2019)

Radio Morphologies of Dust Obscured Starbursts in the SuperCLASS Field, AAS 231 (2019)

Probing the Magnetic Fields in the Environment of MgII Absorbers, AAS 225 (2015)

Age-Dating Optically Visible Star Clusters in Galaxy Merger NGC 5257/5258, AAS 221 (2013)