## SINCLAIRE M. MANNING

CURRICULUM VITAE

Department of Astronomy University of Massachusetts Amherst 710 North Pleasant Street Amherst, MA 01003 email: smanning@astro.umass.edu website: smanning-astro.github.io twitter: smanning206

ORCID: 0000-0003-0415-0121

#### **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

## Student Observing Support (SOS) program, NRAO

(2020)

\$18,000 of supplemental funding for ALMA Cycles 6 and 7

## Graduate Research Opportunities Worldwide (GROW), NSF

(2019)

\$5000 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) Rest-frame UV/optical Morphologies of Obscured Radio Starbursts: Comparing Obscured and Unobscured Star-formation on kpc Scales

### **UT Graduate School Professional Development Award**

(2019)

\$600 of 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)

Honorable Mention, National Society of Black Physicists (NSBP)

<b>Graduate Research Fellow</b> , National Science Foundation \$102,000 Graduate fellowship awarded over three years	(2016-2019)
COLLOQUIA AND INVITED TALKS	

Invited Seminar, UC Irvine Astrophysics Seminar (Virtual)	(Jan. 2021)
<ul> <li>Invited Seminar, JILA/CU Boulder Astrophysics Seminar (Virtual)</li> </ul>	(Oct. 2020)
• Colloquium, Syracuse University Dept. of Physics Colloquium (Virtual)	(Oct. 2020)
TUNA Talk, NRAO, Charlottesville, VA	(2016)

## SERVICE AND MENTORSHIP

## Research Mentorship

# **Undergraduate Students:**

• TBD, (UMass, Spring 2022 –)

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

Astronomy on Tap State College, Guest Speaker (Virtual)	(2020)
Austin Astronomical Society, Guest Speaker (Austin, TX)	(2019)
<ul> <li>Astronomy on Tap ATX, Guest Speaker (Austin, TX)</li> </ul>	(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

## **Telescopes & Observing Experience:**

- Atacama Large Millimeter Array
- *Hubble Space Telescope* (WFC3, ACS)
- *Spitzer Space Telescope* (IRAC)
- Multi-Element Radio Linked Interferometer Network
- Hobby-Eberly Telescope
- James Clerk Maxwell Telescope (5 nights; Subaru)

## **Surveys and Large Collaborations:**

•	<b>O</b>	
• JWST COSN	MOS-Web Survey	(2021 –)
<ul> <li>SuperCLAS</li> </ul>	S Collaboration	(2015 -)

### **Professional Development:**

• Institute for Scientist and Engineer Educators (2018-2019) Professional Development Program (ISEE PDP), UCSC

### **Professional Memberships:**

• American Astronomical Society, Member (2016 –)

• National Society of Black Physicists, Member (2015 –)

## **PUBLICATIONS** (2 first author, 6 co-author)

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

# 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 $\mu$ 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, er, J.A., Manning, S.M., Abdullah, A., Blake, A., Yarber, A., Lambert, T., (2017), ApJ, 843, 2

#### **Posters**

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)