Zili Shen Curriculum Vitae

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EDUCATION

2019 - Yale University Ph.D. Astronomy

Advisor: Prof. Pieter van Dokkum

2015 - 2019 The University of Texas at Austin B.S.A. Astronomy and Physics

Cumulative unweighted GPA: 4.0/4.0

Polymathic Scholars Honors Thesis: Falsifiability of the Multiverse

PEER-REVIEWED PUBLICATIONS

First- and Second-author:

Shen, Z., Danieli, S., van Dokkum, P., et al., 2021, ApJ, 914, L12, arXiv: 2104.03319:

A Tip of the Red Giant Branch Distance of 22.1 ± 1.2 Mpc to the Dark Matter Deficient Galaxy NGC 1052-DF2 from 40 Orbits of Hubble Space Telescope Imaging

Shen, Z., van Dokkum, P., & Danieli, S., 2021, ApJ, 909, 179, arXiv: 2010.07324:

A Complex Luminosity Function for the Anomalous Globular Clusters in NGC1052-DF2 and NGC1052-DF4

Shen, Z., Diercke, A., Denker, C. 2018, Astronomische Nachrichten, 339: 661, arXiv: 1812.04404: Calibration of Full-disk He i 10830 Å Filtergrams of the Chromospheric Telescope

Cannon, J., **Shen, Z.**, McQuinn, K. B. W. et al., 2018, ApJ, **864**, L14, arXiv: 1808.07108: Delayed Stellar Mass Assembly in the Low Surface Brightness Dwarf Galaxy KDG215

Other co-author:

Liu, Q., Abraham, R., Gilhuly, C., et al. (*Incl.* **Shen, Z.**), *ApJ*, in press, arXiv: 2110.11598: *A Method To Characterize the Wide-Angle Point Spread Function of Astronomical Images*

Keim, M. A., van Dokkum, P., Danieli, S., Lokhorst, D., Li, J., **Shen, Z.**, et al., *ApJ* Submitted, arXiv: 2109.09778: *Tidal Distortions in NGC1052-DF2 and NGC1052-DF4: Independent Evidence for a Lack of Dark Matter*

RESEARCH FELLOWSHIPS

2019-2021 Gruber Science Fellowship, Yale University

2018 Research Internship in Science and Engineering (RISE),

German Academic Exchange Service (DAAD)

AWARDS & HONORS

2020	Yale University Nathan Hale Associates Scholar
2019	UT Austin Deans Honored Graduate with Research Distinction
2019	University Co-op George H. Mitchell Award Semifinalist

2018, 2017 U' 2018 K 2018 Fi Ti	T Austin Department of Astronomy Outstanding Senior Award T Austin College of Natural Sciences Distinguished College Scholar evin E. Underhill Memorial Endowed Presidential Scholarship irst place, Physics Department Open House Poster Competition itle: 'Can Starbursts Flatten Mass Distribution in the Centers of Dwarf Galax- s?'
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DEPARTMENT & UNIVERSITY LEADERSHIP

2021-	Yale Astronomy Data Science Seminar	Coordinating Committee
2021-	Yale Graduate Writing Lab Scientific writing consultant for Yale graduate studen ing workshops and conducted one-on-one consulting a lowship proposals, and other academic writing.	-
2021-	Yale University Graduate Student Assembly Graduate student advocate and member of the Public	Astronomy Representative Relations Committee.
2021-	Astronomy Students Council Liaison between the graduate student body and depart	Member tment faculty.
2020 - 2021	Yale Astronomy Climate and Diversity Committee	Subcommittee Chair
2019 - 2021	Yale Astro Sibs Program	Undergraduate Mentor
2017 - 2018	UT Austin Astronomy Students Association	Secretary

OBSERVING EXPERIENCE

Keck I/LRIS (10m): 8 nights. Keck II/KCWI (10m): 6 nights. Palomar/TripleSpec (5m): 2 nights.

McDonald Observatory Harlan J. Smith Telescope / Tull Coudé Spectrograph (2.7m): 5 nights.

Telescope Proposals

Yale 2021B	Keck Observatory (LRIS) - 2 nights awarded (Co-I) Radial velocities of low mass galaxies from broad slit spectroscopy with LRIS
Yale 2021B	Keck Observatory (KCWI) - 4 nights awarded (Co-I) Testing the baryon-only hypothesis for NGC1052-DF4
Yale 2021A	Keck Observatory (LRIS) - 3 nights awarded (Co-I) A nearby globular cluster-rich ultra diffuse galaxy
Yale 2020B	Keck Observatory (KCWI) - 4 nights awarded (Co-I) Testing the baryon-only hypothesis for NGC1052-DF4

TEACHING EXPERIENCE

Conducted weekly review sessions, graded homework and held office hours in the following classes: \mathbf{Y} ale \mathbf{U} \mathbf{n} in the following classes:

ASTR 180: Introduction to Relativity and Black Holes	Fall 2020
ASTR 120: Galaxies and the Universe	Spring 2020

ASTR 110: Planets and Stars

Fall 2021, Fall 2019

Supervised lab safety and facilitated group projects and weekly discussion sessions in:

University of Texas at Austin

UGS 303: Originality in Arts and Sciences M 427J: Differential Equations with Linear Algebra Honors Fall 2016, 2017

Spring 2015

Conference & Posters

Jan 2022	239 th AAS Meeting, Salt Lake City, UT, 'A Tip of the Red Giant Branch Distance of 22.1 ± 1.2 Mpc to the Dark Mat- ter Deficient Galaxy NGC 1052–DF2 from 40 Orbits of Hubble Space Telescope Imaging'
Jan 2019	233^{rd} AAS Meeting, Seattle, WA, Jan 10th 10 AM, Abstract ID 401.01, 'Calibration of full-disk He I 10830 Å filtergrams of the Chromospheric Telescope'
Oct 2018	Texas Astronomy Undergraduate Research Symposium, UT Austin, 'Delayed Stellar Mass Assembly in the Dwarf Galaxy KDG 215'
Oct 2018	Golf Coast Undergraduate Research Symposium, Rice University, Houston, 'Delayed Stellar Mass Assembly in the Dwarf Galaxy KDG 215'
Jul 2018	DAAD RISE Meeting, Heidelberg, Germany, 'Stargazing at Noon: Observations of Solar Filaments'
Mar 2017	Undergraduate Research Forum, UT Austin, 'Observing Eclipsing Binaries'

Outreach and Media

Astrobites Author

Astronomy on Tap Austin Speaker

Jan 2021
May 2019