Zili Shen Curriculum Vitae

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EDUCATION

2019 - present Ph.D. Astronomy

Yale University

Advisor: Prof. Pieter van Dokkum

2015 - 2019 B.S.A. Astronomy and Physics

The University of Texas at Austin

Cumulative unweighted GPA: 4.0

Polymathic Scholars Honors Thesis: Falsifiability of the Multiverse

PEER-REVIEWED PUBLICATIONS

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'

RESEARCH POSITIONS & FELLOWSHIPS

2019	Gruber	Science	Fellowship

2018 Research Internship in Science and Engineering (RISE),

German Academic Exchange Service (DAAD)

AWARDS & HONORS

2019	UT Austin Deans Honored Graduate with Research Distinction	
2019	University Co-op George H. Mitchell Award Semifinalist	
2019	UT Austin Department of Astronomy Outstanding Senior Award	
2017, 2018	UT Austin College of Natural Sciences Distinguished College Scholar	
2018	Kevin E. Underhill Memorial Endowed Presidential Scholarship	
2018	First place, Physics Department Open House Poster Competition	
	Title: 'Can Starbursts Flatten Mass Distribution in the Centers of Dwarf Galaxies?'	

RESEARCH EXPERIENCE

Star Formation History of KDG215, Dr. Kristen McQuinn

Aug 2017 - Present

- Construct color-magnitude diagrams of dwarf galaxies with resolved stellar populations
- Model star formation history with CMD fitting
- Manage the GitHub repository for the CMD fitting tool
- Uncovered the extremely delayed star formation in KDG215

Leibniz Institute of Astrophysics Potsdam (AIP), Prof. Carsten Denker May 2018 - Aug 2018

- Funded by DAAD RISE summer internship
- Developed a data reduction pipeline for solar full-disk He I filtergrams
- Calibrated full-disk Doppler velocities with co-temporal high resolution spectrograph data

Conference & Posters

Jan 2019

233rd 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'

Jan 2018 231st AAS Meeting, Washington DC

Mar 2017 Undergraduate Research Forum, UT Austin,

'Observing Eclipsing Binaries'

Observing Experience

Keck/LRIS (10m): 2 nights.

Palomar/TripleSpec (5m): 2 nights.

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

Outreach

Speaker, Astronomy on Tap Austin

Secretary, Astronomy Students Association

May 2019

2017

TEACHING EXPERIENCE

Responsible for conducting weekly review session, grading homework, holding office hours, and overseeing course communication in the following classes:

Yale University

ASTR 110: Planets and Stars Fall 2019

Responsible for lab supervision and safety, facilitating 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