Zili Shen Curriculum Vitae

Contact zili.shen@yale.edu https://zilishen.github.io/

Information Cell: (+1) 706-524-4773 Skype: caryshencn

**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

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 FELLOWSHIPS

2019-2020 Gruber Science Fellowship, Yale University

"The most prestigious award offered by Yale's Graduate School of Arts and

Sciences to incoming science students."

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
2018, 2017	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 Galax-
	$ies^{Q}$ ,

## RESEARCH EXPERIENCE

Star Formation History of KDG215, Dr. Kristen McQuinn

Aug 2017 - May 2018

- 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 - 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 233<sup>rd</sup> 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'

#### 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

Conducted weekly review sessions, graded homework and held office hours in the following classes:

## Yale University

ASTR 120: Galaxies and the Universe Spring 2020 ASTR 110: Planets and Stars 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 Fall 2016, 2017 M 427J: Differential Equations with Linear Algebra Honors Spring 2015