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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  
[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 &amp; 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 Galaxies?’

## RESEARCH EXPERIENCE

**Star Formation History of KDG215**, Dr. Kristen McQuinn  
 University of Texas at Austin 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

## Solar Full-disk Data Reduction Pipeline, Prof. Carsten Denker

Leibniz Institute of Astrophysics Potsdam (AIP)

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**      [Gulf 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](#)

May 2019

Secretary, [Astronomy Students Association](#)

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