Peter D. Chi

people.physics.tamu.edu/pdchi
pdchi93@gmail.com | (609) 721 2293

Education

Texas A&M University **Fall 2015–Present**
M.S. Astronomy – to be conferred August 2018 College Station, TX
Ph.D. Astronomy – expected May 2020
Advisor: Dr. Louis Strigari

Rutgers, The State University of New Jersey **May 2015**
B.S. Physics; B.S. Astrophysics; minor in Mathematics New Brunswick, NJ
Degrees conferred with high honors, *magna cum laude*
Thesis Title: *Investigating the Limits of Core Creation in Dwarf Galaxies*
Advisor: Dr. Alyson Brooks

Research Experience

Texas A&M University **Fall 2015–Present**
Graduate Research Assistant College Station, TX
· analyzing outputs of dark matter simulations (Aquarius, Caterpillar) using python
· making statistical comparisons between simulations and data from Milky Way satellite galaxies

Research Experiences for Undergraduates (REU) at UT Brownsville **Summer 2013**
Undergraduate Research Assistant Brownsville, TX
· analyzed efficacy of various signal processing techniques developed to look for gravitational wave signals in LIGO data

Rutgers University **Summer 2012–Spring 2015**
Undergraduate Research Assistant New Brunswick, NJ
· analyzed outputs of galaxy simulations in IDL to investigate how stellar feedback affects the matter distribution in galaxies
· reduced radio interferometric data from the VLA using CASA to look for weak spectral features
· wrote a pipeline in IDL to generate a realistic catalog of galaxies to be used in simulating observations of the upcoming SKA radio telescope

Teaching Experience

Texas A&M University **Fall 2016–Spring 2018**
Instructor College Station, TX
Astr 102, Observational Astronomy 8 Sections
· prepared and gave lectures on introductory and current astronomy topics
· taught students how to use star charts to navigate the night sky and how to use telescopes to observe a variety of celestial objects

ISEE Professional Development Program **Spring 2017**
Team member Institute for Scientist & Engineer Educators, UC Santa Cruz, CA
· worked in a team to design and run a 2-day inquiry-based activity for incoming REU students

Rutgers University **Fall 2013–Spring 2015**
Part Time Lecturer New Brunswick, NJ
Phys 387/389, Experiments in Modern and Applied Physics 2 Sections
· guided student groups through 2-week+ labs demonstrating modern physics concepts
· assisted in maintenance and operation of lab equipment, aided students in understanding results and underlying physical principles, and proctored final (oral) examinations
Phys 205, General Physics Lab 1 Section
· guided students through 2-3 hour labs demonstrating introductory mechanics concepts

Outreach and Service

Astronomy on Tap BCS **April 2018–Present**
Speaker and Organizer

Graduate Level Astronomy Software Sessions (GLASS) **2017–Present**
Organizer
· directing an informal program for graduate students to teach each other professional skills and to practice giving talks

Discover, Explore, and Enjoy Physics and Engineering (DEEP) program **2016–Present**
Graduate mentor
· leading a team of undergraduates in building and upgrading hands-on physics demos
· demos presented annually at the Texas A&M Physics and Engineering Festival

Mitchell Institute Star Parties **2015–Present**
Volunteer
· managed public star parties on the Texas A&M campus and nearby locations, including annual events at Camp for All

Rutgers Astronomical Society **2014–2015**
Outreach Coordinator
· organized and ran bimonthly public observing nights
· co-founded the RAS KELT Exoplanet Lab (RASKEL) to train volunteers in exoplanet follow-up using the Schommer Observatory

Honors and Awards

Graduate Merit Fellowship, Texas A&M/Association of Former Students **2015–2019**
Research Experiences for Undergraduates (REU) at UT Brownsville, NSF **2013**
Robert L. Sells Scholarship, Rutgers Department of Physics and Astronomy **2013**
Rutgers Academic Excellence Award, Rutgers University **2013**
Summer Science Program, Aresty Research Center **2012**
David Martin Weiss Memorial Award, Rutgers Department of Mathematics **2012**
Rutgers Scarlet Scholarship, Rutgers University **2011–2015**

Talks and Presentations

Dark Side of the Universe, talk, Astronomy on Tap BCS **April 2018**
Identifying Satellites of the LMC, contributed talk, Joint Fall meeting of Texas APS **October 2017**

Computer Skills

Computer Languages	Python, LaTeX. Experience with IDL, Java, HTML, MatLab
Operating Systems	Windows, Linux, Mac OS

Affiliations

American Physical Society (APS) member
Phi Beta Kappa