Sal Wanying Fu

CONTACT EI INFORMATION W

Email: swfu@berkeley.edu Website: http://swfu.github.io

ORCID: https://orcid.org/0000-0003-2990-0830

RESEARCH INTERESTS Near-field cosmology, satellite galaxies, photometric metallicities, Galactic dynamics, stellar streams, stellar halos, chemical evolution, large surveys

EDUCATION

Ph.D in Astrophysics, UC Berkeley, Berkeley, CA August 2019-present

PD Soros Fellow, NSF Graduate Research Fellow & Cranor Fellow

Advisor: Prof. Daniel R. Weisz

B.A. Physics, Pomona College, Claremont, CA May 2019

Academic advisors: Prof. Jorge Moreno, Prof. Philip Choi Research advisors: Dr. Joshua D. Simon, Dr. Gwen C. Rudie

Thesis: Small-Scale Tests of Λ CDM Cosmology

RESEARCH APPOINTMENTS Graduate Student Researcher, UC Berkeley Aug 2019-Present
Undergraduate Research Intern, Carnegie Observatories June 2016-Aug 2019
Undergraduate Research Assistant, Pomona College Spring 2016

PUBLICATIONS

S. W. Fu, J. D. Simon, et al. 2019. Dynamical Histories of the Crater II and Hercules Dwarf Galaxies, ApJ, 883, 11

S. W. Fu, J. D. Simon, et al. 2018. The Origin of the 300 km s⁻¹ Stream Near Segue 1, ApJ, 866, 42

Presentations

S. W. Fu, D. R. Weisz, et al. September 2020. *The Metallicity Distribution Functions of Ultra-Faint Dwarf Galaxies*. Contributed poster to the "Local Group Symposium," hosted virtually from STScI in Baltimore, MD.

- **S. W. Fu**, J. D. Simon, and D. R. Weisz. November 2019. *Dynamical History of the Crater II Dwarf Galaxy*. Contributed talk to the "Local Local Group" Meeting at KIPAC in Stanford, CA.
- **S. W. Fu**, J. D. Simon, and D. R. Weisz. November 2019. *Dynamical History of the Crater II Dwarf Galaxy*. Contributed talk to UC Berkeley lunch seminar in Berkeley, CA.
- S. W. Fu, J. D. Simon, and D. R. Weisz. June 2019. *Dynamical History of the Crater II Dwarf Galaxy*. Contributed talk to the "Science in Our Own Backyard: Exploring the Galaxy and the Local Group with WFIRST" conference in Pasadena, CA.
- **S. W. Fu**, J. D. Simon, et al. 2019. *Dynamical Histories of the Crater II and Hercules Dwarf Galaxies*. Poster presentation at 233rd AAS Meeting in Seattle, WA
- J. D. Simon, S. W. Fu, et al. 2019. The Nature of the Peculiar Milky Way Satellite Sagittarius II. iPoster presentation at 233rd AAS Meeting in Seattle, WA

Sobeck J., ... S. W. Fu, et al. 2019. An Examination of the APOGEE-2 Survey Data for the Draco Dwarf Spheroidal Galaxy. Poster presentation at 233rd AAS Meeting in

Phi Beta Kappa

ber

American Astronomical Society, Junior Member

Sigma Xi Scientific Research Honor Society, Associate Mem-

Professional

Memberships

SOCIETY

W. Fu, J. D. Simon, et al. *Characterizing the 300 km/s Stream Near Segue 1*. Poster presentation at 231st AAS Meeting in Washington, D.C.

W. Fu, J. D. Simon, et al. A Study of Low-Metallicity Red Giant Stars in the Ursa Minor Dwarf Spheroidal Galaxy Using APOGEE Survey Data. Poster Presentation at the 229th AAS Meeting in Grapevine, TX

	the 225th Title Meeting in Grapevine, 174	
Telescope Allocations	HST/WFC3, HST/ACS imaging; GO-16229, 23 orbits (PI) Magellan/MIKE High-Resolution Spectroscopy, 3 Nights (Co-I)	
Awards	Paul & Daisy Soros Fellowship for New Americans Hertz Fellowship Finalist NSF Graduate Research Fellowship, National Science Foun-	2020 2020 2019
	dation	2010
	Cranor Fellowship, UC Berkeley Astrophysics Barry M. Goldwater Scholar, Barry M. Goldwater Scholarship and Excellence in Education Foundation	2019 2018
	Tileston Junior Physics Prize Pomona College Department of Physics and Astronomy	Nov 2018
	Inaugural FUTURE of Physics at Caltech Cohort Pomona College Scholar, Pomona College Tileston Sankarana Physics Price	Nov 2018 Jun 2016-Jun 2019
	Tileston Sophomore Physics Prize Pomona College Department of Physics and Astronomy Moncrief Astronomy Prize Pomona College Department of Physics and Astronomy	Jan 2018 Sep 2016
TEACHING	UC Berkeley (Fall 2019-present) Ay160: Stellar Physics, Graduate Student Instructor Pomona College (Spring 2016-Spring 2019)	Fall 2019
	PHYS128: Electronics (with community partnership) — Mentor ASTR101: Observational Astronomy — Mentor & Lab TA ASTR51: Introductory Astronomy — Mentor ASTR101: Observational Astronomy — Mentor & Lab TA ASTR51: Introductory Astronomy — Mentor PHYS70: Spacetime, Quanta and Entropy — Mentor & Lab TA	Spring 2019 Fall 2018 Spring 2018 Fall 2017 Spring 2017 Fall 2016
SERVICE	ASTR2: Galaxies and Cosmology — Lab TA Community Partnership With Fremont Academy Femineers	Spring 2016 Jan 2019-May 2019
SERVICE	Physics Department Liaison Physics Cohort Program Organizer Carnegie Summer Student Program Student Leader Community Partnership With Fremont Academy Femineers Carnegie Summer Student Program Student Leader Social Justice in STEM Reading Group Co-Organizer	Jan 2016-May 2019 Jan 2016-May 2019 Jun 2018-Aug 2018 Mar 2018-May 2018 Jun 2017-Aug 2017 Jan 2017-May 2017

May 2019-Present

Sep 2016-Present

Sep 2018-Present

Professional References Dr. Daniel R. Weisz Assistant Professor, UC Berkeley dan.weisz@berkeley.edu

Dr. Gwen C. Rudie Staff Scientist, Carnegie Observatories gwen@carnegiescience.edu

Prof. Philip Choi Associate Professor, Pomona College philip.choi@pomona.edu Dr. Joshua D. Simon Staff Scientist, Carnegie Observatories jsimon@carnegiescience.edu

Prof. Jorge Moreno Assistant Professor, Pomona College jorge.moreno@pomona.edu