Sal Wanying Fu

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INFORMATION Website: http://swfu.github.io

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

EDUCATION

Ph.D in Astrophysics, UC Berkeley, Berkeley, CA

August 2019-present

NSE Craduata Personal Follow & Cranon Follow

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

GPA: 11.636/12

RESEARCH APPOINTMENTS Graduate Student Researcher, UC Berkeley
Undergraduate Research Intern, Carnegie Observatories
Undergraduate Research Assistant, Pomona College
Spring 2016

PUBLICATIONS

S. W. Fu, J. D. Simon, et al. *The Nature of the Peculiar Milky Way Satellite, Sgr II*, in prep.

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, 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. 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 Seattle, WA

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

Telescope Allocations	Magellan/MIKE High-Resolution Spectroscopy, 3 Nights (Co-I)	
Awards	Hertz Fellowship Finalist	2020
	PD Soros Fellowship Finalist	2020
	NSF Graduate Research Fellowship, National Science Foundation	2019
	Cranor Fellowship, UC Berkeley Astrophysics	2019
	Barry M. Goldwater Scholar, Barry M. Goldwater Scholarship and Excellence in Education Foundation	2018
	Tileston Junior Physics Prize	Nov 2018
	Pomona College Department of Physics and Astronomy	1107 2010
	Inaugural FUTURE of Physics at Caltech Cohort	Nov 2018
	Pomona College Scholar, Pomona College	Jun 2016-Jun 2019
	Tileston Sophomore Physics Prize	Jan 2018
	Pomona College Department of Physics and Astronomy	
	Moncrief Astronomy Prize	Sep 2016
	Pomona College Department of Physics and Astronomy	-
Teaching	UC Berkeley (Fall 2019-present)	
	Ay160: Stellar Physics, Graduate Student Instructor	Fall 2019
	Pomona College (Spring 2016-Spring 2019)	G : 2010
	PHYS128: Electronics (with community partnership) — Mentor	Spring 2019
	ASTR101: Observational Astronomy — Mentor & Lab TA	Fall 2018
	ASTR51: Introductory Astronomy — Mentor ASTR101: Observational Astronomy — Mentor & Lab TA	Spring 2018 Fall 2017
	ASTR101: Observational Astronomy — Mentor & Lab TA ASTR51: Introductory Astronomy — Mentor	Fall 2017
	PHYS70: Spacetime, Quanta and Entropy — Mentor & Lab TA	Spring 2017 Fall 2016
	ASTR2: Galaxies and Cosmology — Lab TA	Spring 2016
	ASTR2. Galaxies and Cosmology — Lab TA	Spring 2010
Service	Community Partnership With Fremont Academy Femineers	Jan 2019-May 2019
	Physics Department Liaison	Jan 2016-May 2019
	Physics Cohort Program Organizer	Jan 2016-May 2019
	Carnegie Summer Student Program Student Leader	Jun 2018-Aug 2018
	Community Partnership With Fremont Academy Femineers	Mar 2018-May 2018
	Carnegie Summer Student Program Student Leader	Jun 2017-Aug 2017
	Social Justice in STEM Reading Group Co-Organizer	Jan 2017-May 2017
Professional	Phi Beta Kappa	May 2019-Present
SOCIETY	American Astronomical Society, Junior Member	Sep 2016-Present
MEMBERSHIPS	Sigma Xi Scientific Research Honor Society, Associate Member	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