

Sal Wanying Fu

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

EDUCATION **B.A. Physics, Pomona College**, Claremont, CA May 2019
Overall GPA: 3.87

RESEARCH Dynamical modeling of the Milky Way and its satellites
INTERESTS Cosmological context of MW dwarf galaxies and stellar populations

RESEARCH **Observatories of the Carnegie Institution of Washington**
EXPERIENCE Undergraduate Research Fellow Jun 2016-Sep 2018
Advised by: Dr. Josh Simon, Dr. Gwen Rudie

The Origin and Classification of the Sgr II Satellite Apr 2018-Present
Using optical spectroscopy from the IMACS spectrograph to determine dark matter content and metallicity dispersion of Sgr II satellite. Modeling orbit of satellite to infer its possible origins.

The Origin of the 300 km/s Stream Near Segue 1 Jun 2017-Present
Identified new members of the 300S stream in APOGEE-2 and SEGUE survey data. Used dynamical modeling techniques and chemical abundance analysis to infer the origin of the stellar stream. Work culminated in paper publication and poster presentation.

Chemical Abundances of UMi dSph in APOGEE Jun 2016-Aug 2016
Identified systematic velocity variation in timeseries velocity data of very faint stars from the APOGEE-2 proto-DR14 reduction. Work culminated in poster presentation.

Pomona College Department of Physics and Astronomy
Undergraduate Research Assistant Jan 2016-May 2016
Advised by: Dr. Philip Choi

Searching for NEOs Using Synthetic Tracking Jan 2016-May 2016
Conducted remote observing program using the 1-meter telescope at Table Mountain Observatory to search for faint, near-earth asteroids.

PUBLICATIONS AND **S. W. Fu**, J.D. Simon, et al. ArXiv preprints, arXiv:1804.08622
PRESENTATIONS

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

AWARDS	Barry M. Goldwater Scholar , Barry M. Goldwater Scholarship and Excellence in Education Foundation	2018
	Pomona College Scholar , Pomona College	Jun 2016-Present
	Tileston Sophomore Physics Prize , Pomona College Department of Physics and Astronomy	Jan 2018
	Moncrief Astronomy Prize , Pomona College Department of Physics and Astronomy	Sep 2016
MENTORING EXPERIENCE	ASTR51: Introductory Astronomy — Mentor	Spring 2018
	ASTR101: Observational Astronomy — Mentor & Lab TA	Fall 2017
	ASTR51: Introductory Astronomy — Mentor	Spring 2017
	PHYS70: Spacetime, Quanta and Entropy — Mentor & Lab TA	Fall 2016
	ASTR2: Galaxies and Cosmology — Lab TA	Spring 2016
SERVICE	Physics Department Liaison	Jan 2016-Present
	Physics Cohort Program Organizer	Jan 2016-Present
	Social Justice in STEM Reading Group Co-Organizer	Jan 2017-May 2017
PROFESSIONAL REFERENCES	Dr. Joshua D. Simon Staff Scientist, Carnegie Observatories jsimon@carnegiescience.edu	Dr. Gwen C. Rudie Staff Scientist, Carnegie Observatories gwen@carnegiescience.edu
	Prof. Jorge Moreno Assistant Professor, Pomona College jorge.moreno@pomona.edu	Prof. Philip Choi Associate Professor, Pomona College philip.choi@pomona.edu