# Jenna Samuel

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# **EDUCATION**

University of California, Davis
Ph.D. in Physics, Advisor: Andrew Wetzel

Florida International University
B.S. in Physics

### SCHOLARSHIPS AND AWARDS

NSF Astronomy and Astrophysics Postdoctoral Fellow	2021-
• McNair Graduate Fellow	2015–2016
• McNair Scholar	2014 – 2015

#### **Publications**

- [1] E. D. Jahn, L. V. Sales, A. Wetzel, **J. Samuel**, K. El-Badry, M. Boylan-Kolchin, and J. S. Bullock, "The effects of LMC-mass environments on their dwarf satellite galaxies in the FIRE simulations", *arXiv e-prints*, arXiv:2106.03861, arXiv:2106.03861, Jun. 2021. arXiv: 2106.03861 [astro-ph.GA].
- [2] J. Samuel, A. Wetzel, S. Chapman, E. Tollerud, P. F. Hopkins, M. Boylan-Kolchin, J. Bailin, and C.-A. Faucher-Giguère, "Planes of satellites around Milky Way/M31-mass galaxies in the FIRE simulations and comparisons with the Local Group", MNRAS, vol. 504, no. 1, pp. 1379–1397, Jun. 2021.
- [3] I. B. Santistevan, A. Wetzel, R. E. Sanderson, K. El-Badry, **J. Samuel**, and C.-A. Faucher-Giguère, "The origin of metal-poor stars on prograde disc orbits in FIRE simulations of Milky Way-mass galaxies", MNRAS, vol. 505, no. 1, pp. 921–938, Jul. 2021.
- [4] A. Smercina, E. F. Bell, J. Samuel, and R. D'Souza, "Relating the Diverse Merger Histories and Satellite Populations of Nearby Galaxies", arXiv e-prints, arXiv:2107.04591, arXiv:2107.04591, Jul. 2021. arXiv: 2107.04591 [astro-ph.GA].
- [5] **J. Samuel**, A. Wetzel, E. Tollerud, S. Garrison-Kimmel, S. Loebman, K. El-Badry, P. F. Hopkins, M. Boylan-Kolchin, C.-A. Faucher-Giguère, J. S. Bullock, S. Benincasa, and J. Bailin, "A profile in FIRE: resolving the radial distributions of satellite galaxies in the Local Group with simulations", MNRAS, vol. 491, no. 1, pp. 1471–1490, Jan. 2020.
- [6] S. Garrison-Kimmel, A. Wetzel, P. F. Hopkins, R. Sanderson, K. El-Badry, A. Graus, T. K. Chan, R. Feldmann, M. Boylan-Kolchin, C. C. Hayward, J. S. Bullock, A. Fitts, J. Samuel, C. Wheeler, D. Kereš, and C.-A. Faucher-Giguère, "Star formation histories of dwarf galaxies in the FIRE simulations: dependence on mass and Local Group environment", MNRAS, vol. 489, no. 4, pp. 4574–4588, Nov. 2019.

# TALKS

TALKS	
Satellite dwarf galaxies around Milky Way-mass hosts in the FIRE simulations University of Washington	2021
Satellite planes in the FIRE simulations Space Telescope Science Institute	2021
Predictions for satellite galaxy distributions around $MW/M31$ -mass host galaxies AAS Dissertation Talk	2021
$Predictions\ for\ satellite\ galaxy\ distributions\ around\ Milky\ Way\ analogs\ with\ NGRST$ Galaxy Formation and Evolution in the Era of the Nancy Grace Roman Space Telescope, STScI	2020
Spatial and kinematic coherence of $MW/M31$ satellites in the FIRE simulations UC Davis Astrophysics Symposium & Bay Area Local Group Meeting	2019
Posters	
The Distribution of Satellite Galaxies around MW/M31-mass Hosts in the FIRE Simulation STSci Symposium - The Local Group: Assembly & Evolution	ons 2020
The distribution of satellite galaxies around $MW/M31$ -mass hosts in the FIRE simulations Santa Cruz Galaxy Workshop	2019
Observing	
2 nights, Lick Observatory/Kast  Completing the census of M106 satellite galaxies  PI: Jenna Samuel	2020
48 orbits, Hubble Space Telescope General Observer Program (Cycle 28)  Andromeda & the Seven Dwarfs: M31 Mass, Satellite Orbits, & the Nature of the Satellite Plane PI: Tony Sohn	2020
Teaching	
• Instructor at University of California, Davis  Intro Physics (PHY1B) Remote learning online curriculum and lectures for large lecture course.	ring 2020
• Teaching Assistant at University of California, Davis Astronomy, physics, and math methods courses and labs.	016–2019
• Learning Assistant at Florida International University 2	012-2015

Modern physics labs with data analysis, and intro physics labs.

## SERVICE AND OUTREACH

• Leader at Diversity and Inclusion in Physics 2017–Current Facilitate weekly meetings on department climate, create peer-mentoring workshop series for students, and publicize resources for equity in teaching and research. • Graduate Student Representative at Committee for Improving Graduate Education 2020-2021 Plan and deliver seminars and guides on mental health, financial support, and mentorship. Team Member at APS-IDEA 2020-2021 APS Inclusion, Diversity, and Equity Alliance • Mentor at UC Davis Physics and Astronomy and Calbridge North 2018-2020 Mentor to first year graduate students at UC Davis, and to a senior undergraduate through Calbridge. • Speaker at Davis Senior High School 2020 Galaxy Simulations and Life in Grad School • Organizer and Speaker at Astronomy on Tap, Davis 2018-2019 Put on free public talks, trivia, and Q&A once a month. Talk: 'Spacecraft of Apollo 11' Local Organizing Committee Member at CUWiP 2019 2018-2019

Planned lodging, laboratory tours, transportation, and recruitment for 150 attendees.