

Dr. Yanga R. “Yan” Fernández

Professor

University of Central Florida, Department of Physics

4111 Libra Drive, Orlando, FL 32816-2385

407-823-2325 yan@ucf.edu

(a) Professional Preparation

Caltech	Pasadena, CA	Astronomy	B.S., 1993
Univ. of Maryland	College Park, MD	Astronomy	M.S. 1995
Univ. of Maryland	College Park, MD	Astronomy	Ph.D. 1999
Univ. of Hawai‘i	Honolulu, HI	Astronomy	Postdoc 1999 to 2005

(b) Appointments

2019 – present	Professor, Dept. of Physics, University of Central Florida
2016 – present	Associate Scientist, Florida Space Inst., University of Central Florida
2011 – 2019	Associate Professor, Dept. of Physics, University of Central Florida
2005 – 2011	Assistant Professor, Dept. of Physics, University of Central Florida
2002 – 2005	SIRTF/Spitzer Fellow, Institute for Astronomy, University of Hawai‘i

(c) Publications

- (i) Five most current publications
 - a. S. A. Myers, E. S. Howell, C. Magri, R. J. Vervack, Y. R. Fernandez, et al. 2023. Constraining the Limitations of NEATM-like Models: A Case Study with Near-Earth Asteroid (285263) 1998 QE2. *Planetary Sci. J.* **4**, 5. DOI 10.3847/PSJ/aca89d
 - b. O. Harrington Pinto, M. Womack, Y. Fernandez, J. Bauer 2022. A Survey of CO, CO₂, and H₂O in Comets and Centaurs. *Planetary Sci. J.* **3**, 247. DOI 10.3847/PSJ/ac960d
 - c. C. M. Lisse, and 14 colleagues including Y. R. Fernandez 2022. 29P/ Schwassmann–Wachmann 1: A Rosetta Stone for Amorphous Water Ice and CO ↔ CO₂ Conversion in Centaurs and Comets? *Planetary Sci. J.* **3**, 251. DOI 10.3847/PSJ/ac9468
 - d. M. L. Hinkle, E. S. Howell. Y. R. Fernandez, et al. 2022. The global thermophysical properties of (433) Eros. *Icarus* **382**, 114939. DOI 10.1016/j.icarus.2022.114939
 - e. C. A. Schambeau, Y. R. Fernandez et al. 2021. Characterization of Thermal-infrared Dust Emission and Refinements to the Nucleus Properties of Centaur 29P/ Schwassmann–Wachmann 1. *Planetary Sci. J.* **2**, 126. DOI 10.3847/PSJ/abfe6f
- (ii) Other significant publications
 - a. J. M. Bauer, Y. R. Fernandez, S. Protopapa, L. M. Woodney 2023. Comet science with ground based and space based surveys in the new millennium. In *Comets III* (K. Meech et al., Eds.), U. Az. Press, Tucson, in press. arXiv 2210.09400.
 - b. B. T. Bolin, Y. R. Fernandez, et al. 2021. Initial Characterization of Active Transitioning Centaur, P/2019 LD2 (ATLAS), Using Hubble, Spitzer, ZTF, Keck, Apache Point Observatory, and GROWTH Visible and Infrared Imaging and Spectroscopy. *Astronomical J.* **161**, 116. DOI 10.3847/1538-3881/abd94b

(d) Graduate teaching experience

- AST 6112, “Origin and Evolution of Planetary Systems,” Spring 2023
- AST 5765, “Advanced Astronomical Data Analysis,” Spring 2022, Fall 2022
- PHY 6246, “Classical Mechanics,” Fall 2017, Fall 2019, Fall 2020, Fall 2021
- AST 6938, “Special Topics,” Spring 2021
- AST 5263, “Advanced Observational Astronomy,” Fall 2016, Spring 2018

(e) Graduate students mentored (to completion, if applicable)

- As Chair of thesis/dissertation committees: 7 total. Most recent completions:
 - Jennifer N. Larson, PhD in Physics, 2023.
 - Brynn Presler-Marshall, MS in Physics, 2021.
 - Jenna L. Jones, PhD in Physics, 2018.
 - Charles A. Schambeau, PhD in Physics, 2018.
 - Emily A. Kramer, PhD in Physics, 2014.
- As Member of thesis/dissertation committee: 29 total. Most recent completions:
 - Olga Harrington Pinto, PhD in Physics, 2023.
 - Vanessa Lowry, PhD in Physics, 2022.
 - Michael Himes, PhD in Physics, 2022.
 - Amy Lebleu-DeBartola, MS in Physics, 2022.
 - Anicia Arredondo, PhD in Physics, 2021.
- Total number of graduate students mentored on thesis/dissertation committees over the course of your career: 36.

(f) Other synergistic activities related to Graduate Education

- Developed two entirely new graduate courses, and co-developed two other entirely new graduate courses, at UCF.
- Mentored several graduate students from traditionally-underrepresented demographic groups.
- Integrating my graduate students into my own research networks, thus giving them opportunities to continue their research career paths after graduation.
- Emphasizing the skills that will bring the graduate students the most benefit in their future careers.
- Participating in scientific collaborations where graduate students at other institutions are integral members of these teams, thus providing opportunities to informally advise even more graduate students.