

Curriculum Vitae: Dr. Yanga R. “Yan” Fernández

University of Central Florida
Department of Physics
4000 Central Florida Blvd.
Orlando, FL 32816-2385 U.S.A.
Website: <https://planets.ucf.edu/people/dr-yanga-fernandez/>

Ph: +1-407-8232325
Fax: +1-407-8235112
Email: yan@ucf.edu

Education

University of Maryland, College Park, Ph.D. Astronomy, 1999
Dissertation: *Physical Properties of Cometary Nuclei*
University of Maryland, College Park, M.S. Astronomy, 1995
California Institute of Technology, B.S. with Honors, Astronomy, 1993

Professional Experience and Appointments

2019 - present Professor, Department of Physics, University of Central Florida
2016 - present Associate Scientist, Florida Space Institute, University of Central Florida
2011 - 2019 Associate Professor, Department of Physics, University of Central Florida
2005 - 2011 Assistant Professor, Department of Physics, University of Central Florida
2002 - 2005 SIRTf/Spitzer Fellow, Institute for Astronomy, University of Hawai‘i
1999 - 2002 Scientific Researcher, Institute for Astronomy, University of Hawai‘i

Honors and Awards

- Asteroid (12225) Yanfernandez named in honor.
 - International Astronomical Union membership, awarded 2012.
 - SIRTf/Spitzer Fellowship, 2002-2005.
 - UCF Scroll & Quill Society membership, awarded 2017.
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External Funding

- As PI, 21 grants totalling \$1,633K.
 - As Co-PI or Co-I, 16 grants totalling \$893K to YRF.
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Impact Indicators *(as of March 15, 2022)*

- Google Scholar lists about **6600 citations all-time** of refereed and unrefereed work.
<https://scholar.google.com/citations?user=wPjuffkAAAAJ&hl=en>.
- Astrophysics Data System has recorded about **3900 citations all-time** of refereed and unrefereed work. <https://tinyurl.com/4d4xf97m>.

- Web of Science (WoS) has recorded over **3200 citations all-time** of refereed work that is included in WoS.
- Current *h*-index (from WoS) is 33.
- WoS Citations per year for recent years: ◦2022 (so far): 33; ◦2021: 179; ◦2020: 205; ◦2018: 215; ◦2018: 272; ◦2017: 198; ◦2016: 167; ◦2015: 205; ◦2014: 168; ◦2013: 184; ◦2012: 177; ◦2011: 208.

All Refereed Publications

(108 total, see also ORCID <https://orcid.org/0000-0003-1156-9721>)

Refereed Book Chapters (3 total)

1. Y. R. Fernández *et al.* 2015. Asteroids and Comets. In *Treatise on Geophysics*, 2nd Edition (G. Schubert, Ed.-in-Chief), Vol. 10 (T. Spohn, Ed.), Elsevier, pp. 487-528. DOI 10.1016/B978-0-444-53802-4.00184-6.
2. R. L. Jones *et al.*, including Y. R. Fernández 2009. The Solar System. In *LSST Science Book* (LSST Science Collaborations and LSST Project, Eds.), Version 2.0, arXiv: 0912.0201, <https://www.lsst.org/scientists/scibook>, pp. 97-136.
3. P. L. Lamy, I. Toth, Y. R. Fernández, H. A. Weaver 2004. The sizes, shapes, albedos, and colors of cometary nuclei. In *Comets II* (M. Festou *et al.*, Eds.), U. Ariz. Press, Tucson, <https://www.lpi.usra.edu/books/CometsII/download.html>, pp. 223-264.

Refereed Journal Articles (97 total)

4. M. Hinkle *et al.*, including Y. R. Fernández 2022. The Global Thermophysical Properties of (433) Eros. *Icarus*, in press.
5. C. A. Schambeau *et al.*, including Y. R. Fernández 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.
6. J. N. Purdum *et al.*, including Y. R. Fernández 2021. Time-series and Phasecurve Photometry of Episodically-Active Asteroid (6478) Gault in a Quiescent State Using APO, GROWTH, P200 and ZTF. *Astrophysical J. Lett.* **911**, #L35. DOI 10.3847/2041-8213/abf2ca.
7. T. D. Clements and Y. R. Fernández 2021. Dust Production from Mini Outbursts of Comet 29P/Schwassmann-Wachmann 1. *Astronomical J.* **161**, #73. DOI 10.3847/1538-3881/abd1d7.
8. T. Kareta *et al.*, including Y. R. Fernández 2021. Contemporaneous Multi-Wavelength and Precovery Observations of Active Centaur P/2019 LD2 (ATLAS). *Planetary Sci. J.* **2**, #48. DOI 10.3847/PSJ/abe23d.

9. B. Bolin *et al.*, including [Y. R. Fernández](#) 2021. Initial Visible and Mid-IR Characterization of P/2019 LD2 (ATLAS), an Active Transitioning Centaur Among the Trojans, with Hubble, Spitzer, ZTF, Keck, APO and GROWTH Imaging and Spectroscopy. *Astronomical J.* **161**, #116. DOI 10.3847/1538-3881/abd94b.
10. E. Fernández-Valenzuela *et al.*, including [Y. R. Fernández](#) 2021. Compositional study of trans-Neptunian objects at $\lambda > 2.2 \mu\text{m}$. *Planetary Sci. J.* **2**, #10. DOI 10.3847/PSJ/abc34e.
11. D. E. Trilling *et al.*, including [Y. R. Fernández](#) 2020. Spitzer's Solar System studies of asteroids, planets, and the zodiacal cloud. *Nature Astronomy* **4**, 940-946. DOI 10.1038/s41550-020-01221-y.
12. C. M. Lisse *et al.*, including [Y. R. Fernández](#) 2020. Spitzer's Legacy Science Studies of Comet, Centaur, and Kuiper Belt Object Relics of Solar System Formation. *Nature Astronomy* **4**, 930-939. DOI 10.1038/s41550-020-01219-6.
13. C. D. Lewin *et al.*, including [Y. R. Fernández](#) 2020. Near-infrared Spectral Characterization of Solar-Type Stars in the Northern Hemisphere. *Astronomical J.* **160**, #130. DOI 10.3847/1538-3881/aba0c0.
14. C. A. Schambeau, underbar [Y. R. Fernández](#), *et al.* 2019. Analysis of HST WFPC2 Observations of Centaur 29P/Schwassmann-Wachmann 1 while in Outburst to Place Constraints on the Nucleus' Rotation State. *Astronomical J.* **158**, #259. DOI 10.3847/1538-3881/ab53e2.
15. O. Groussin, *et al.*, including [Y. R. Fernández](#) 2019. Spitzer Space Telescope observations of bilobate comet 8P/Tuttle. *Astronomy & Astrophysics* **632**, #A104. DOI 10.1051/0004-6361/201936458.
16. S. S. Sheppard, [Y. R. Fernández](#), A. Moullet 2018. The Albedos, Sizes, Colors and Satellites of Dwarf Planets Compared with Newly Measured Dwarf Planet 2013 FY27. *Astronomical J.* **156**, #270. DOI 10.3847/1538-3881/aae92a.
17. D. E. Trilling *et al.*, including [Y. R. Fernández](#) 2018. Spitzer observations of interstellar object 1I/'Oumuamua. *Astronomical J.* **156**, #261. DOI 10.3847/1538-3881/aae88f.
18. J. D. Rosser *et al.*, including [Y. R. Fernández](#) 2018. Behavioral Characteristics and CO+CO₂ Production Rates of Halley-type Comets Observed by NEOWISE. *Astronomical J.* **155**, #164. DOI 10.3847/1538-3881/aab152.
19. B. Bolin, H. A. Weaver, [Y. R. Fernández](#), *et al.*, 2018. APO time resolved color photometry of highly-elongated interstellar object 1I/'Oumuamua. *Astrophysical J. Letters* **852**, #L2. DOI 10.3847/2041-8213/aaa0c9.
20. E. Howell *et al.*, including [Y. R. Fernández](#) 2018. SHERMAN – A shape-based thermophysical model. II. Application to 8567 (1996 HW1). *Icarus* **303**, 220-233. DOI 10.1016/j.icarus.2017.12.003.

21. C. Magri *et al.*, including [Y. R. Fernández](#) 2018. SHERMAN – A shape-based thermophysical model. I. Model description and validation. *Icarus* **303**, 203-219. DOI 10.1016/j.icarus.2017.11.025.
22. C. M. Lisse *et al.*, including [Y. R. Fernández](#) 2017. Infrared Spectroscopy of HR 4796A's Bright Outer Cometary Ring + Tenuous Inner Hot Dust Cloud. *Astronomical J.* **154**, #182. DOI 10.3847/1538-3881/aa855e.
23. R. Kokotanekova *et al.*, including [Y. R. Fernández](#) 2017. Rotation of Cometary Nuclei: New Lightcurves and an Update of the Ensemble Properties of Jupiter-Family Comets. *Monthly Notices of Royal Astron. Society* **471**, 2974-3007. DOI 10.1093/mnras/stx1716.
24. S. P. D. Birch *et al.*, including [Y. R. Fernández](#) 2017. Geomorphology of Comet 67P/Churyumov-Gerasimenko. *Monthly Notices of Royal Astron. Society* **469**, S50-S67. DOI 10.1093/mnras/stx1096.
25. J. M. Bauer, T. Grav, [Y. R. Fernández](#), *et al.*, 2017. Debiasing the NEOWISE Cryogenic Mission Comet Populations. *Astronomical J.* **154**, #53. DOI 10.3847/1538-3881/aa72df.
26. S. E. Marshall *et al.*, including [Y. R. Fernández](#) 2017. Thermal properties and an improved shape model for near-Earth asteroid (162421) 2000 ET70. *Icarus* **292**, 22-35. DOI 10.1016/j.icarus.2017.03.028.
27. E. A. Kramer, J. M. Bauer, [Y. R. Fernández](#), *et al.*, 2017. The perihelion emission of comet C/2010 L5 (WISE). *Astrophysical J.* **838**, #58. DOI 10.3847/1538-4357/aa5f59.
28. J. L. Crowell, E. S. Howell, [Y. R. Fernández](#), *et al.* 2017. Radar and lightcurve shape model of near-Earth asteroid (1627) Ivar. *Icarus* **284**, 359-371. DOI 10.1016/j.icarus.2016.11.008.
29. C. A. Schambeau, [Y. R. Fernández](#), *et al.* 2017. Analysis of R-band observations of an outburst of Comet 29P/Schwassmann-Wachmann 1 to place constraints on the nucleus? rotation state. *Icarus* **284**, 359-371. DOI 10.1016/j.icarus.2016.11.026.
30. N. A. Moskovitz *et al.*, including [Y. R. Fernández](#) 2017. Near-infrared thermal emission from near-Earth asteroids: Aspect-dependent variability. *Icarus* **284**, 97-105. DOI 10.1016/j.icarus.2016.11.011.
31. J. Licandro, V. Ali-Lagoa, G. Tancredi, [Y. R. Fernández](#) 2016. Size and albedo distributions of asteroids in cometary orbits using WISE data. *Astronomy & Astrophysics* **585**, #A9. DOI 10.1051/0004-6361/201526866.
32. C. A. Schambeau, [Y. R. Fernández](#), *et al.* 2015. A new analysis of Spitzer observations of comet 29P/Schwassmann-Wachmann 1. *Icarus* **260**, 60-72. DOI

- 10.1016/j.icarus.2015.06.038.
33. J.M. Bauer *et al.*, including Y. R. Fernández 2015. The NEOWISE-discovered comet population and the CO+CO₂ production rates. *Astrophysical J.* **814**, #85. DOI 10.1088/0004-637X/814/2/85.
 34. E. A. Kramer, Y. R. Fernández *et al.* 2014. A dynamical analysis of the dust tail of comet C/1995 O1 (Hale-Bopp) at high heliocentric distance. *Icarus* **236**, 136-145. DOI 10.1016/j.icarus.2014.03.033.
 35. J. P. Emery, Y. R. Fernández, *et al.* 2014. Thermal Infrared Observations and Thermophysical Characterization of OSIRIS-REx Target Asteroid (101955) Bennu. *Icarus* **234**, 17-35. DOI 10.1016/j.icarus.2014.02.005.
 36. Y. R. Fernández *et al.* 2013. Thermal properties, sizes, and size distribution of Jupiter-Family cometary nuclei. *Icarus* **226**, 1138-1170. DOI 10.1016/j.icarus.2013.07.021.
 37. M. S. Kelley, Y. R. Fernández, *et al.* 2013. The persistent activity of Jupiter-family comets at 3-7 AU. *Icarus* **225**, 475-494. DOI 10.1016/j.icarus.2013.04.012.
 38. J. M. Bauer *et al.*, including Y. R. Fernández 2013. Centaurs and scattered disk objects in the thermal infrared: Analysis of WISE/NEOWISE observations. *Astrophysical J.* **773**, #22. DOI 10.1088/0004-637X/773/1/22.
 39. K. J. Meech *et al.*, including Y. R. Fernández 2013. The demise of comet 85P/Boethin, the first EPOXI mission target. *Icarus* **222**, 662-678. DOI 10.1016/j.icarus.2012.09.002.
 40. A. S. Rivkin *et al.*, including Y. R. Fernández 2013. The NEO (175706) 1996 FG3 in the 2-4 μm spectral region: Evidence for an aqueously altered surface. *Icarus* **223**, 493-498. DOI 10.1016/j.icarus.2012.12.016.
 41. L. O'Rourke *et al.*, including Y. R. Fernández 2013. Determination of an upper limit for the water outgassing rate of main-belt comet P/2012 T1 (PANSTARRS). *Astrophysical J.* **774**, #L13. DOI 10.1088/2041-8205/774/1/L13.
 42. J. M. Bauer *et al.*, including Y. R. Fernández 2012. WISE/NEOWISE preliminary analysis and highlights of the 67P/Churyumov-Gerasimenko near nucleus environs. *Astrophysical J.* **758**, #18. DOI 10.1088/0004-637X/758/1/18.
 43. J. M. Bauer *et al.*, including Y. R. Fernández 2012. WISE/NEOWISE observations of active bodies in the Main Belt. *Astrophysical J.* **747**, #49. DOI 10.1088/0004-637X/747/1/49.
 44. H. H. Hsieh *et al.*, including Y. R. Fernández 2012. Discovery of main-belt comet P/2006 VW139 by Pan-STARRS1. *Astrophysical J.* **748**, #L15. DOI 10.1088/2041-8205/748/1/L15.
 45. J. Licandro *et al.*, including Y. R. Fernández 2012. 5-14 μm Spitzer spectra of

- Themis family asteroids. *Astronomy & Astrophysical* **537**, #A73. DOI 10.1051/0004-6361/201118142.
46. H. Campins *et al.*, including Y. R. Fernández 2012. Spectra of asteroid families in support of Gaia. *Planetary & Space Sci.* **73**, 95-97. DOI 10.1016/j.pss.2012.06.017.
 47. J. M. Bauer *et al.*, including Y. R. Fernández 2011. WISE/NEOWISE observations of comet 103P/Hartley 2. *Astrophysical J.* **738**, #171. DOI 10.1088/0004-637X/738/2/171.
 48. K. J. Meech *et al.*, including Y. R. Fernández 2011. EPOXI: 103P/Hartley 2 observations from a worldwide campaign. *Astrophysical J.* **734**, #L1. DOI 10.1016/j.icarus.2011.02.016.
 49. J. Ziffer *et al.*, including Y. R. Fernández 2011. Near-infrared spectroscopy of primitive asteroid families. *Icarus* **213**, 538-546. DOI 10.1016/j.icarus.2011.04.008.
 50. C. Magri *et al.*, including Y. R. Fernández 2011. Radar and photometric observations and shape modeling of contact binary near-Earth asteroid (8567) 1996 HW1. *Icarus* **214**, 210-227. DOI 10.1016/j.icarus.2011.02.019.
 51. K. J. Meech *et al.*, including Y. R. Fernández 2011. Deep Impact, Stardust-NExT and the Behavior of Comet 9P/Tempel 1 from 1997-2010. *Icarus* **213**, 323-344. DOI 10.1016/j.icarus.2011.02.016.
 52. M. J. S. Belton *et al.*, including Y. R. Fernández 2011. Stardust-NExT, Deep Impact, and the accelerating spin of 9P/Tempel 1. *Icarus* **213**, 345-368. DOI 10.1016/j.icarus.2011.01.006.
 53. H. Campins *et al.*, including Y. R. Fernández 2010. Water ice and organics on the surface of the asteroid 24 Themis. *Nature* **464**, 1320-1321. DOI 10.1038/nature09029.
 54. Y. R. Fernández 2009. That's the way the comet crumbles: Splitting Jupiter-family comets. *Planetary & Space Science* **57**, 1218-1227. DOI 10.1016/j.pss.2009.01.003.
 55. Y. R. Fernández, D. Jewitt, J. E. Ziffer 2009. Albedos of small Jovian Trojans. *Astronomical J.* **138**, 240-250. DOI 10.1088/0004-6256/138/1/240.
 56. J. Licandro, H. Campins, M. Kelley, Y. R. Fernández, *et al.*, 2009. Spitzer observations of the asteroid-comet transition object and potential spacecraft target 107P/(4015) Wilson-Harrington. *Astronomy & Astrophysics* **507**, 1667-1670. DOI 10.1051/0004-6361/200913116.
 57. C. M. Lisse, Y. R. Fernández, *et al.* 2009. Spitzer Space Telescope observations of the nucleus of comet 103P/Hartley 2. *Publ. Astronomical Society of the Pacific* **121**, 968-975. DOI 10.1086/605546.

58. H. H. Hsieh, D. Jewitt, Y. R. Fernández 2009. Albedos of main-belt comets 133P/Elst-Pizarro and 176P/LINEAR. *Astrophysical J.* **694**, L111-L114. DOI 10.1088/0004-637X/694/2/L111.
59. H. Campins, J. P. Emery, M. Kelley, Y. R. Fernández, *et al.* 2009. Spitzer observations of spacecraft target 162173 (1999 JU3). *Astronomy & Astrophysics* **503**, L17-L20. DOI 10.1051/0004-6361/200912374.
60. H. Campins, M. S. Kelley, Y. R. Fernández, *et al.* 2009. Low-perihelion near-Earth asteroids. *Earth Moon & Planets* **105**, 159-165. DOI 10.1007/s11038-009-9310-2.
61. O. Groussin *et al.*, including Y. R. Fernández 2009. The size and thermal properties of the nucleus of comet 22P/Kopff. *Icarus* **199**, 568-570. DOI 10.1016/j.icarus.2008.07.015.
62. N. Dello Russo *et al.*, including Y. R. Fernández 2008. The volatile composition of comet 17P/Holmes after its extraordinary outburst. *Astrophysical J.* **680**, 793-802. DOI 10.1086/587459.
63. J. M. Bauer *et al.*, including Y. R. Fernández 2008. The large-grained dust coma of 174P/Echeclus. *Publ. Astronomical Society of the Pacific* **120**, 393-404. DOI 10.1086/587552.
64. J. P. Emery, C. M. Dalle Ore, D. Cruikshank, Y. R. Fernández, *et al.* 2007. Ices on (90377) Sedna: Confirmation and compositional constraints. *Astronomy & Astrophysics* **466**, 395-398. DOI 10.1051/0004-6361:20067021.
65. Y. R. Fernández *et al.* 2007. Near-infrared light curve of comet 9P/Tempel 1 during Deep Impact. *Icarus* **187**, 220-227. (Reprinted in *Icarus* **191S**, 424-431.) DOI 10.1016/j.icarus.2006.09.019.
66. C. M. Lisse *et al.*, including Y. R. Fernández 2006. Spitzer spectral observations of the Deep Impact ejecta. *Science* **313**, 635-640. DOI 10.1126/science.1124694.
67. Y. R. Fernández *et al.* 2006. Comet 162P/Siding Spring: A surprisingly large nucleus. *Astronomical J.* **132**, 1354-1360. DOI 10.1086/506252.
68. H. Campins *et al.*, including Y. R. Fernández 2006. Nuclear spectra of comet 162P/Siding Spring (2004 TU₁₂). *Astronomical J.* **132**, 1346-1353. DOI 10.1086/506253.
69. H. U. Käufel, T. Bone, H. Boehnhardt, Y. R. Fernández, *et al.* 2005. Pre-impact mid-IR and optical observations of comet 9P/Tempel 1. *Earth Moon & Planets* **97**, 331-339. DOI 10.1007/s11038-006-9071-0.
70. J. E. Ziffer *et al.*, including Y. R. Fernández 2005. Near-infrared spectra of two asteroids with low Tisserand invariant. *Earth Moon & Planets* **97**, 203-212. DOI 10.1007/s11038-006-9083-9.
71. P. A. Abell, Y. R. Fernández, *et al.* 2005. Physical characteristics of comet nucleus C/2001 OG₁₀₈ (LONEOS). *Icarus* **179**, 174-194. DOI 10.1016/

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72. Y. R. Fernández, D. C. Jewitt, S. S. Sheppard 2005. Albedos of asteroids in comet-like orbits. *Astronomical J.* **130**, 308-318. DOI 10.1086/430802.
 73. Y. R. Fernández *et al.* 2005. New near-aphelion light curves of comet 2P/Encke. *Icarus* **175**, 194-214. DOI 10.1016/j.icarus.2004.10.019.
 74. K. J. Meech *et al.*, including Y. R. Fernández 2005. Deep Impact: Observations from a world-wide Earth-based campaign. *Science* **310**, 265-269. DOI 10.1126/science.1118978.
 75. C. M. Lisse, M. F. A'Hearn, O. Groussin, Y. R. Fernández, *et al.* 2005. Rotationally resolved 8-35 μm Spitzer Space Telescope observations of the nucleus of comet 9P/Tempel 1. *Astrophysical J.* **625**, L139-L142. DOI 10.1086/431238.
 76. D. P. Cruikshank, J. A. Stansberry, J. P. Emery, Y. R. Fernández, *et al.* 2005. The high-albedo Kuiper Belt object (55565) 2002 AW₁₉₇. *Astrophysical J.* **624**, L53-L56. DOI 10.1086/430420.
 77. M. J. S. Belton, N. H. Samarasinha, Y. R. Fernández, *et al.* 2005. The excited spin state of comet 2P/Encke. *Icarus*, **175**, 181-193. DOI 10.1016/j.icarus.2004.10.029.
 78. K. J. Meech, M. F. A'Hearn, Y. R. Fernández, *et al.*, 2005. The Deep Impact Earth-based campaign. *Space Science Reviews* **117**, 297-334. DOI 10.1007/s11214-005-3382-8.
 79. M. J. S. Belton *et al.*, including Y. R. Fernández 2005. Deep Impact: Working properties for the target nucleus – comet 9P/Tempel 1. *Space Science Reviews* **117**, 137-160. DOI 10.1007/s11214-005-3389-1.
 80. J. A. Stansberry *et al.*, including Y. R. Fernández 2004. Spitzer observations of the dust coma and nucleus of 29P/Schwassmann-Wachmann 1. *Astrophysical J. Supplement* **154**, 463-468. DOI 10.1086/422473.
 81. C. M. Lisse, Y. R. Fernández, *et al.* 2004. A tale of two very different comets: ISO and MSX measurements of dust emission from 126P/IRAS (1996) and 2P/Encke (1997). *Icarus* **171**, 444-462. DOI 10.1016/j.icarus.2004.05.015.
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 83. J. M. Bauer, K. J. Meech, Y. R. Fernández, *et al.* 2003. Physical survey of 24 Centaurs with visible photometry. *Icarus* **166**, 195-211. DOI 10.1016/j.icarus.2003.07.004.
 84. J. M. Bauer, Y. R. Fernández, *et al.* 2003. An optical survey of active Centaur C/NEAT (2001 T4). *Publ. Astronomical Society of the Pacific* **115**, 981-989. DOI

- 10.1086/377012.
85. D. C. Jewitt, S. S. Sheppard, Y. R. Fernández 2003. 143P/Kowal-Mrkos and the shapes of cometary nuclei. *Astronomical J.* **125**, 3366-3377. DOI 10.1086/374947.
 86. Y. R. Fernández, S. S. Sheppard, D. C. Jewitt 2003. The albedo distribution of Jovian Trojan asteroids. *Astronomical J.* **126**, 1563-1574. DOI 10.1086/377015.
 87. Y. R. Fernández *et al.* 2003. The nucleus of *Deep Impact* target comet 9P/Tempel 1. *Icarus* **164**, 481-491. (Reprinted in *Icarus* **191S**, 11-21.) DOI 10.1016/S0019-1035(03)00142-8, 10.1016/j.icarus.2003.04.003.
 88. Y. R. Fernández 2002. The nucleus of comet Hale-Bopp: size and activity. *Earth Moon & Planets* **89**, 3-25. DOI 10.1023/A:1021545031431.
 89. Y. R. Fernández, D. C. Jewitt, S. S. Sheppard 2002. Thermal properties of Centaurs Asbolus and Chiron. *Astronomical J.* **123**, 1050-1055. DOI 10.1086/338436.
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 92. C. M. Lisse, A. Schulz, Y. R. Fernández, *et al.* 2002. Discovery of an extremely red object in the field of HD 155826. *Astrophysical J.* **570**, 779-784. DOI 10.1086/339722.
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 94. Y. R. Fernández *et al.* 2000. Physical properties of the nucleus of comet 2P/Encke. *Icarus* **147**, 145-160. DOI 10.1006/icar.2000.6431.
 95. Y. R. Fernández *et al.* 1999. The nucleus and inner coma of comet Hale-Bopp: Results from a stellar occultation. *Icarus* **140**, 205-220. DOI 10.1006/icar.1999.6127.
 96. C. M. Lisse, Y. R. Fernández, *et al.* 1999. Infrared observations of the dust emitted by comet Hale-Bopp. *Earth Moon & Planets* **78**, 251-257. DOI 10.1023/A:1006261303055.
 97. C. M. Lisse, Y. R. Fernández, *et al.* 1999. The nucleus of comet Hyakutake (C/1996 B2). *Icarus* **140**, 189-204. DOI 10.1006/icar.1999.6131.
 98. I. de Pater *et al.*, including Y. R. Fernández 1997. BIMA observations of comet Hyakutake: upper limit to the 2.7 mm continuum emission. *Planetary & Space Science* **45**, 731-734. DOI 10.1016/S0032-0633(97)00078-0.
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100. Y. R. Fernández *et al.* 1997. X-Band VLA observations of comet Hyakutake (C/1996 B2) and implications for nuclear properties. *Planetary & Space Science* **45**, 735-739. DOI 10.1016/S0032-0633(97)00079-2.

Refereed Conference Proceedings (8 total)

101. I. M. Coulson *et al.*, including Y. R. Fernández 2009. JCMT observations of the Deep Impact event. In *Deep Impact as a World Observatory Event: Synergies in Space, Time, and Wavelength* (H. U. Käufel and C. Sterken, Eds.), Springer, Berlin, pp. 69-72. DOI 10.1007/978-3-540-76959-0_7.
102. J. Pittichova, Y. R. Fernández, *et al.* 2009. Dust evolution of comet 9P/Tempel 1. In *Deep Impact as a World Observatory Event: Synergies in Space, Time, and Wavelength* (H. U. Käufel and C. Sterken, Eds.), Springer, Berlin, pp. 317-322. DOI 10.1007/978-3-540-76959-0_42.
103. C. M. Lisse *et al.*, including Y. R. Fernández 2007. Planetary science goals for the Spitzer warm era. In *The Science Opportunities of the Warm Spitzer Mission Workshop* (L. J. Storrie-Lombardi and N. A. Silberman, Eds.), American Institute of Physics, Melville, NY, pp. 184-212. DOI 10.1063/1.2806779.
104. D. P. Cruikshank, M. A. Barucci, J. P. Emery, Y. R. Fernández, *et al.*, 2007. Physical properties of trans-neptunian objects. In *Protostars and Planets V* (B. Reipurth *et al.*, Eds.), U. Ariz. Press, Tucson, <https://www.lpi.usra.edu/books/PPV/download.html>, pp. 879-893.
105. D. P. Cruikshank *et al.*, including Y. R. Fernández 2006. Solar System observations with Spitzer Space Telescope. In *The Spitzer Space Telescope: New Views of the Cosmos* (L. Armus and W. T. Reach, Eds.), Astronomical Society of the Pacific, San Francisco, <http://aspbooks.org/custom/publications/paper/357-0023.html>, pp. 23-30.
106. Y. R. Fernández *et al.* 2006. Review of Spitzer Space Telescope observations of small bodies. In *Asteroids, Comets, and Meteors: Proceedings of the International Astronomical Union Symposium 229* (D. Lazzaro *et al.*, Eds.), Cambridge Univ. Press, Cambridge, pp. 121-131. DOI 10.1017/S1743921305006708.
107. C. M. Lisse, M. F. A'Hearn, Y. R. Fernández, S. B. Peschke 2002. A search for trends in cometary dust emission. In *Dust in the Solar System and Other Planetary Systems* (S. F. Green *et al.*, Eds.), Pergamon, pp. 259-268. DOI 10.1016/S0964-2749(02)80351-1.
108. D. C. Jewitt and Y. R. Fernández 2001. Physical properties of planet-crossing objects. In *Collisional Processes in the Solar System* (H. Rickman and M. Marov, Eds.), Kluwer, Dordrecht, pp. 143-161. DOI 10.1007/978-94-010-0712-2_9.

Teaching History

All courses listed here are at UCF. Underline indicates course co-created by YRF.

Double underline indicates course created solely by YRF.

Graduate courses:

- AST 5263 “Advanced Observational Astronomy”
- PHY 6246 “Classical Mechanics”
- AST 5765 “Advanced Astronomical Data Analysis”
- AST 6938 “Special Topics”, course on New Horizons mission
- AST 6938 “Special Topics”, course on small bodies
- AST 6156 “Planetary Seminar”

Upper-level undergraduate courses:

- AST 4700 “Experimental Methods in Astronomy”
- AST 4762 “Astronomical Data Analysis”
- AST 3722C “Techniques of Observational Astronomy”

Lower-level undergraduate courses:

- AST 2002, AST 2002H “Astronomy”
- AST 2002L “Astronomy Lab”
- PHY 2053 “College Physics I”
- PHY 2054 “College Physics II”
- PHY 2048 “Physics for Engineers & Scientists I”

Undergraduate Mentoring: Research

- Research mentor to 20 UCF undergraduates and 1 high-school student over career
- Honors in the Major cmte. member for 4 UCF undergraduates over career

Graduate Student Mentoring: Thesis and Dissertation Supervision

All students listed here were advised while at UCF.

As **Committee Chair**, **Total 7** (3 PhD completed, 2 PhD ongoing, 2 MS completed):

- Emily A. Kramer, Ph.D. in Physics, Planetary Sciences Track, 2014.
- Jenna L. Jones, Ph.D. in Physics, 2018.
- Charles A. Schambeau, Ph.D. in Physics, Planetary Sciences Track, 2018.
- Mary L. Hinkle, pre-candidate for Ph.D. in Physics, Planetary Sciences Track, expected PhD 2023.
- Jennifer N. Larson, candidate for Ph.D. in Physics, Planetary Sciences Track, expected PhD 2023.
- Brynn Presler-Marshall, M. S. in Physics, Planetary Sciences Track, 2021.
- Jean-Marc Denis, M.S. in Physics, 2012.

As Committee Member, Total 27:

- Ph.D. in Physics: 23
- M.S. in Physics: 4

Recent Selected Leadership and Service History

All entries listed here occurred while at UCF.

Professional Leadership & Service:

- Acted as ‘Principal Scientist’ for Arecibo Observatory (2018-2019), liaising between scientific community and UCF management.
- Member of Small Bodies Assessment Group, reporting to NASA Advisory Council Planetary Science Subcommittee (2011-2014).
- Member of NASA “Comet ISON Observing Campaign” team and “Coordinated Investigations of Comets” team (2013-2014).
- Panel Reviewer and External Reviewer for NASA Science Mission Directorate Research and Analysis programs (numerous times, 2011-present): Discovery Data Analysis Program (panel chair, 2017), Outer Planet Research Program, Planetary Astronomy Program, Rosetta Data Analysis Program, Solar System Workings.
- Member of Atacama Large Millimeter Array Review Panel (2015-2017).
- Member of Hubble Space Telescope Time Allocation Committee (2014), and an external reviewer for that committee (2016, 2020, 2021).
- External Reviewer for James Clerk Maxwell Telescope (2015), and for Spitzer Space Telescope (2014, 2017).
- Referee/reviewer of manuscripts to top U.S. and **international** journals in astronomy (*Icarus*, *Astrophysical Journal Letters*, *Astronomical Journal*, *Astronomy & Astrophysics*) (ongoing).
- Member of Advisory Board to Planetary Data System’s Small Bodies Node (2009-2019).
- Reviewer of datasets submitted to the Planetary Data System for archiving (2006, 2008, 2011, 2014).

University Leadership & Service:

- Building liaison for Building #74, Robinson Observatory (2009-present).
- Director of UCF’s Robinson Observatory (2009-2021), coordinating all research, education, and outreach projects at that facility, including organizing events that serve approximately 1,000 UCF students, K-12 students, Scouts, and members of the general public every year.
- Faculty advisor for Astronomy Society at UCF, a Registered Student Organization (2005-present).

Professional Societies

- International Astronomical Union
- American Astronomical Society, Division for Planetary Sciences
- American Geophysical Union