

FARISA Y. MORALES

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RESEARCH INTERESTS

- **Debris Disk Incidence and Characterization:** To assess the frequency of planetary system formation by investigating circumstellar planetary debris disks of dust, characterized by infrared excesses over photospheric levels, and by studying their spectral energy distributions (SEDs) to investigate their dust spatial distribution, chemical composition, and evolution.
- **Debris Disk Modeling:** To advance our understanding of disk architecture and grain properties, by modeling the SEDs of circumstellar dust around main sequence stars using spectroscopic and photometric data.
- **High-Contrast Imaging:** To search for dust-shepherding exoplanets using the Adaptive Optics systems at Keck II Observatory in HI, and Palomar Observatory in CA.

EDUCATION

Ph.D. in Physics, 2011, University of Southern California (USC)
M.S. in Physics, 2005, California State University, Northridge (CSUN)
B.S. in Astrophysics, 2003, University of California, Los Angeles (UCLA)
A.A. with emphasis in Mathematics, 1999, Los Angeles Mission Collage (LAMC)

EMPLOYMENT HISTORY

May 2000–present **NASA's Jet Propulsion Laboratory (JPL)** Pasadena, CA

- *Program Manager, Astronomy & Heliophysics Research and Analysis Office (712), under the Astronomy and Physics Directorate's Formulation Office (7000), and*
- *Research Scientist III – Sci. Div. (32), Astrophysics and Space Sciences (326); April 2020–present*
- *Research Scientist III – Science Division (32); April 2006–April 2020*
- *APX – Spitzer Science Office Staff, Science Division (32); Jan. 2002–March 2006*
- *APT – Technical Support, Instruments Division, Div. (38); March 2001–Dec. 2001*
- *Summer Undergraduate Research Fellow (SURF) – Telecom. and Ground Sys. Engr.; May – Aug. 2000*

June 2022–present **Los Angeles Mission College (LAMC)** Sylmar, CA

- *Dean of Academic Affairs—STEM/Health/Fitness*

Aug. 2014–Aug. 2022 **Moorpark College (MC)** Moorpark, CA

- *Adjunct Faculty and Co-Chair, Astronomy, Physics, Engr., & Comp. Sci. Dept.*

Aug. 2011–present **Calif. State University, Northridge (CSUN)** Northridge, CA

- *Adjunct Faculty, Physics & Astronomy Department*

Aug. 2010–Dec. 2013 **Cerritos Community College** Norwalk, CA

- *Adjunct Instructor, Physics & Astronomy Department*

Feb. 2007–Aug. 2014 **L. A. Comm. College Dist. (LA, Pierce, Mission)** Los Angeles, CA

- *Adjunct Instructor, Physics, Astronomy & Planetary Science Department*

Sep. 2007–Jun. 2011 **University of Southern Calif. (USC)** Los Angeles, CA

- *Teacher Assistant, Physics & Astronomy Department*

Sep. 1997–May 1999 **Los Angeles Mission College (LAMC)** Sylmar, CA

- *Mathematics and Philosophy Tutor*

SELECTED AWARDS

- JPL/Caltech Team Award (May 2020)
- NASA/Caltech JPL Mariner Award (Aug. 2013)
- NASA Honors Award – Spitzer Public Affairs and Educational Outreach Team (July 2011)
- American Astronomical Society (AAS) Chambliss Award (January 2011)
- NASA Honors Award (Oct. 2004, June 2009, July 2011)
- La Opinion Newspaper—Mujeres Destacadas Award (March 2011)
- NASA Honors Award – Spitzer Science In-Reach Team (June 2009)
- NASA Honors Award – Spitzer Space Telescope Mission Operations Team (Oct 2004)
- The Adrian Herzog Outstanding Graduate Student Award (CSUN, June 2004)
- Caltech's Summer Undergraduate Research Fellowship (SURF) Award (May 2000)
- JPL Scholar of the Year Award (June 1999)

SELECTED REFEREED PUBLICATIONS

- **Morales, F. Y.;** Beaurone, J.; Bryden, G.; Swain, M.; Werner, M. W.; *AstoSil Detected from The Terrestrial-Planet*

Environments of Two-Belt Debris Disks, 2020, ApJL, in prep.

- Werner, M. W.; Gorjian, V.; **Morales, F.**; and 5 coauthors, *Spitzer-Kepler Survey*, 2020, ApJ, in prep.
- Berardo, D.; Crossfield, I. J. M.; Werner, M.; Petigura, E.; Christiansen, J.; Ciardi, D. R.; Dressing, C.; Fulton, B. J.; Gorjian, V.; Greene, T. P.; Hardegree-Ullman, K.; Kane, S. R.; Livingston, J.; **Morales, F.**; Schlieder, J. E., *Revisiting the HIP 41378 System with K2 and Spitzer*, 2019, AJ, Vol. 157, AI: 185B.
- Matthews, E.; Hinkley, S.; Vigan, A.; Kennedy, G.; Sutcliffe, B.; Wickenden, D.; Treves, S.; David, T.; Meshkat, T.; Mawet, D.; **Morales, F.**; Shannon, A.; Stapelfeldt, K.; *Constraining the presence of giant planets in two-belt debris disc systems with VLT/SPHERE direct imaging and dynamical arguments*, 2018, MNRAS, Vol. 480, pp. 2757M.
- Crepp, J. R.; Gonzales, E. J.; Bowler, B. P.; **Morales, F.**; Stone, J.; Spalding, E.; Vaz, A.; Hinz, P.; Ertel, S.; Howard, A.; Isaacson, H., *The TRENDS High-contrast Imaging Survey. VII. Discovery of a Nearby Sirius-like White Dwarf System (HD 169889)*, 2018, ApJ, Vol. 864, 42C.
- Meshkat, T.; Mawet, D.; Bryan, M.; Hinkley, S.; Bowler, B.; Stapelfeldt, K.; Batygin, K.; Padgett, D.; **Morales, F.**; and 4 coauthors, *A Direct Imaging Survey of Spitzer-detected Debris Disks: Occurrence of Giant Planets*, 2017, AJ 154:245M.
- Choquet, É.; Bryden, G.; Perrin, M. D.; Soummer, R.; Augereau, J. -C.; Chen, C. H.; Debes, J. H.; Gofas-Salas, E.; Hagan, J. B.; Hines, D. C.; Mawet, D.; **Morales, F.**; and 6 coauthors, *HD 104860 and HD 192758: Two Debris Disks Newly Imaged in Scattered Light with the Hubble Space Telescope*, 2018, ApJ 854:53C
- Chen, G.; Knutson, H.; Dressing, C.; Morley, C.; Werner, M.; Gorjian, V.; Beichman, C.; Benneke, B.; Christiansen, J.; Ciardi, D.; Crossfield, I.; Howell, S.; Krick, J.; Livingston, J.; **Morales, F.**; Schlieder, J., *An Improved Transit Measurement for a 2.4 R_⊕ Planet Orbiting A Bright Mid-M Dwarf K2-28*, 2018, AJ 155:223C
- Matthews, E.; Hinkley, S.; Vigan, A.; Kennedy, G.; Sutcliffe, B.; Wickenden, D.; Treves, S.; David, T.; Meshkat, T.; Mawet, D.; **Morales, F.**; Shannon, A.; Stapelfeldt, K., *Constraining the presence of giant planets in two-belt debris disc systems with VLT/SPHERE direct imaging and dynamical arguments*, 2018, MNRAS 480:2757M
- Feinstein, A.; Schlieder, J.; Livingston, J.; Ciardi, D.; Howard, A.; Arnold, L.; Barentsen, G.; Bristow, M.; Christiansen, J.; Crossfield, I.; Dressing, C.; Gonzales, E.; Kosiarek, M.; Lintott, C.; Miller, G.; **Morales, F.**; and 10 coauthors, *K2-288Bb: A Small Temperate Planet in a Low-mass Binary System Discovered by Citizen Scientists*, 2019, AJ 157:40F
- **Morales, F. Y.**, G. Bryden, M. W. Werner, and K. R. Stapelfeldt, *Herschel-Resolved Spitzer Debris Disks around Main-sequence Stars—Two Belts and Icy Grains*, 2016, ApJ 831:97.
- Mawet, D., David, T., Bottom, M., Hinkley, S., Stapelfeldt, K., Padgett, D., Mennesson, B., Serabyn, E., **Morales, F.**, Kuhn, J., *Discovery of a Low-mass Companion Around HR 3549*, 2015, ApJ 811, 103M.
- Kennedy, G., Wyatt, M., Bailey, V., Bryden, G., Danchi, W., Defrère, D., Haniff, C., Hinz, P., Lebreton, J., Mennesson, B., Millan-Gabet, R., **Morales, F.**, Panić, O., Rieke, G. Roberge, A., Serabyn, E., Shannon, A., Skemer, A., Stapelfeldt, K., Su, K., and Weinberger, A., 2015, *Exo-zodi Modeling for the Large Binocular Telescope Interferometer*, ApJS, 216, 23.
- **Morales, F. Y.**, G. Bryden, M. W. Werner, and K. R. Stapelfeldt, *Herschel-resolved Outer Belts of Two-belt Debris Disks around A-type Stars: HD 70313, HD 71722, HD 159492, and F-type: HD 104860*, 2013, ApJ 776, 111.
- **Morales, F. Y.**, D. L. Padgett, G. Bryden, M. W. Werner, and E. Furlan, *WISE Detections of Dust in the Habitable Zones of Planet-bearing Stars*, 2012, ApJ 757, 7.
- **Morales, F. Y.**, G. H. Rieke, M. W. Werner, G. Bryden, K. R. Stapelfeldt, and K. Y. L. Su, *Common Warm Dust Temperatures Around Main-Sequence Stars*, 2011, ApJ 730, L29.
- **Morales, F. Y.**, M. W. Werner, G. Bryden, P. Plavchan, K. R. Stapelfeldt, G. H. Rieke, K. Y. L. Su, C. A. Beichman, C. H. Chen, K. Grogan, S. J. Kenyon, A. Moro-Martin, et al., *Spitzer Mid-IR Spectra of Dust Debris Around A and Late B Type Stars: Asteroid Belt Analogs and Power-Law Dust Distributions*, 2009, ApJ 699, 1067