Dr. Ramses M. Ramirez, Assistant Professor

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EDUCATION

Georgia Institute of Technology	Atlanta, GA	Aerospace Engineering	B.S., 2001
University of South Florida	Tampa, FL	Geology	2004
Arizona State University	Tempe, AZ	Geological Sciences	M.S., 2009
Pennsylvania State University	State College, PA	Dual Title: Geosciences/Astrobiology	Ph.D. 2014

APPOINTMENTS	Assistant Professor, University of Central Florida, August 2021- present
	Professor (*unpaid courtesy appointment)*, University of South Florida, January 2021 – January 2022
	Affiliate Research Scientist, Space Science Institute (Boulder, Co.), Sept. 2018 – August 2021
	Research Scientist, Earth-Life Science Institute (Tokyo, Japan), Sept. 2017 – July 2021
	Research Associate, Cornell University Dept. of Astron., Sept. 2014 - Sept. 2017
	Visiting Scientist, NASA Ames, May 2014 – August 2014
	Research Assistant, Pennsylvania State University, Jan. 2010 – May 2014
	Research Assistant, Arizona State University, Jan. 2006 – June 2006
PUBLICATIONS (RECENT)	Dietrick, R. , **Ramirez, R.M.** et al. 2023. Functionality of Ice Latitude EBM Tenacity (FILLET). Protocol Version 1.0. , Planetary Science Journal, 4, 39, **doi** 10.3847/PSJ/acba05
~3550 citations, GS h-index: 21	Ogohara K., Ramirez, R.M. et al. 2022. The Mars system revealed by the Martian Moons eXploration mission, Earth, Planets and Space, Earth, Planets and Space, 74, 1

*student mentee papers	*Bonati, I. and Ramirez, R.M. 2021. The influence of surface CO_2 condensation on the evolution of warm and cold rocky planets orbiting Sun-like stars, Monthly Notices of the Royal Astronomical Society, 504, 1, 1029 – 1038
	Mendez, A.,**Ramirez, R.M.** et al. 2021. Habitability Models for Astrobiology. Astrobiology, 21, 10, doi:10.1089/ast2020.2342
	Godin, P., **Ramirez, R.M.** et al. 2020. Collision-induced absorption of CH_4-CO_2 and H_2-CO_2 complexes and their effect on the ancient Martian atmosphere. JGR-Planets, doi: 10.1029/2019JE006357
SOME KEY PUBLICATIONS (SELECTED)	**Ramirez, R.M.**, Craddock, R.A., Usui, T. 2020. Climate simulations of early Mars with estimated precipitation, runoff, and erosion rates. Journal of Geophysical Research: Planets, 125, e2019JE006160, doi: 10.1029/2019JE006160
	Ramirez, R.M. and R.A. Craddock. 2018. The geological and climatological case for a warmer and wetter early Mars. Nature Geoscience 11, 230 - 237
	Ramirez, R.M., Kopparapu R., Zugger, M., Robinson, T.D., Freedman, R., Kasting, J.F., 2014. Warming early Mars with CO_2 and H_2. Nat. Geosc., 7, 59 - 63
	Ramirez, R.M., Kaltenegger, L., 2017. A volcanic hydrogen habitable zone. The Astrophysical Journal Letters, 837, L4, 1
	Kopparapu, R., **Ramirez, R.M.**(co-primary author), Kasting, J., et al., 2013. Habitable zones around main-sequence stars: New Estimates. *ApJ*, 765, 2, 131

GRAD COURSES AST-6165 Planetary Atmospheres (Spring 2022)

GRAD STUDENTS Jonathan Keathley (first UCF graduate student entering in Fall 2023)
Irene Bonati Planetary Physics, Ph.D., Tokyo Institute of Technology, March 2021

SYNERGISTIC ACTIVITIES

-Developed rapid 2-D/3-D model, *PlaHab*, an advanced climate model that mimics many of the results of complex general circulation models, but is much more versatile and operates at a fraction of the computational cost

-Developed and taught first online graduate course in Planetary Atmospheres during first year as Assistant Professor

-Has written numerous op-eds and popular articles for the *Huffington Post, Scientific American*, *Centauri Dreams,* and other scientific media outlets on topics ranging from habitability to human exploration of Mars

-Public Speaker**,** Talk: The Goldilocks Zone and Life in the Cosmos, *Astronomy On Tap*
February 2023
-Guest Editor, Earth, Planetary and Space Special Issue: MMX (Martian Moons eXploration mission) 2020-