

# German Martinez

## Curriculum Vitae: November 2023

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### Education

- **Ph.D. Physics**, *Universidad Complutense de Madrid (UCM)*, Spain, 2010.  
Title: Characterization of the Martian Planetary Boundary Layer.
- **Certificado de Aptitud Pedagógica** (equivalent to a M.Ed.), *UCM*, Spain, 2007.
- **M.S., Atmospheric Sciences**, *UCM*, Spain, 2007.
- **B.S., Physics**, *UCM*, Spain, 2005.

### Professional Experience

- **Manager and Senior Scientist**, *Lunar and Planetary Institute, USRA*, Sept 2022 – present.
- **Staff Scientist**, *Lunar and Planetary Institute, USRA*, July 2019 – Aug 2022.
- **Assistant Research Scientist**, *University of Michigan, Ann Arbor*, Jan 2013 – June 2019.
- **Postdoctoral Research Fellow**, *University of Michigan, Ann Arbor*, Feb 2011 – Dec 2012.
- **Visiting Scientist**, *University of Bergen, Norway*, Aug 2010 – Jan 2011.
- **Research Assistant**, *Universidad Complutense de Madrid, Spain*, Nov 2007 – July 2010.
- **Research Assistant**, *Universidad Politécnic de Catalunya, Spain*, Aug 2007 – Oct 2007.
- **Research Assistant**, *Universidad Complutense de Madrid, Spain*, Oct 2005 – July 2007.

### Missions

#### Participation

- **Mars 2020**, 2014 – present.  
Role: Co-I of the MEDA environmental suite; Science co-lead of MEDA's Thermal and Infrared sensor; Co-lead of the Atmospheric Working Group.
- **Mars Science Laboratory**, 2005 – 2007 and 2013 – present.  
Role: Team member of REMS; Led the recalibration of REMS UV fluxes.
- **Mars Phoenix**, 2019.  
Role: Led the recalibration of the MECA/TECP relative humidity measurements.

#### Data Contributed to NASA PDS

- UV fluxes, Mars Science Laboratory REMS, 2019 – present.
- Relative Humidity, Mars Phoenix MECA/TECP, 2019.

#### Instrument & Mission Development

- **Hydrological Cycle and Habitability Explorer (HydraX)**, ESA's F Mission, 2018 – present.  
Role: Project Scientist. Status: Declined.
- **Modern Aqueous Habitat Reconnaissance Suite (MAHRS)**, 2016 – present.

Role: Helped define science objectives.

- **Thermal Infrared Sensor** onboard NASA's Mars 2020 mission, 2013 – *present*.  
Role: Co-led scientific design, instrument reviews and calibration activities.

## Grants

### Current

- **PI**, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA), Phase D/E", Jet Propulsion Laboratory, 10/1/19 – 9/30/24.
- **PI**, "MSL Science Operations: Supporting REMS", University of Michigan through Jet Propulsion Laboratory, 10/1/19 – 9/30/24.
- **Co-I**, "Support for Planetary Sample Science (SPSS)", NASA; PI: Dr. Lisa Gaddis, 11/01/23 – 10/31/26.
- **Co-I**, "Effects of Global Dust Storms on Water Vapor in the Martian South Polar Region", Mars Data Analysis Program; PI: L. K. Tamppari (JPL), 07/26/2021 – 07/26/2024.

### Past

- **PI**, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA)", Jet Propulsion Laboratory, 10/29/14 – 6/30/19.
- **PI**, "Recalibration and Analysis of the Phoenix Mission's Thermal and Electrical and Conductivity Probe (TECP) Relative Humidity Data", Mars Data Analysis Program, 6/10/15 – 6/9/19.
- **Co-I**, "Consolidating the pathway towards a rigorous Observing System Simulation Experiment (OSSE) infrastructure for Mars", USRA Internal Research and Development funds; PI: O. Reale, 10/1/20 – 9/30/21.
- **Co-I**, "Investigating the Martian near-surface water exchange: Insights from comparisons at polar and equatorial latitudes", Mars Data Analysis Program; PI: E. G. Rivera-Valentín, 9/1/18 – 8/30/19.
- **Coll.**, "Measuring Molecular Oxygen, Water Vapor, and Aerosols with ChemCam Passive Sky Observations", Mars Data Analysis Program; PI: T. H. McConnochie, 8/1/19 – 7/31/22.
- **Coll.**, "ESP2016-79612-C3-1-R: Ciencia y tecnología de instrumentos espaciales para la caracterización del ambiente marciano en múltiples misiones de NASA - II: REMS (Fase E), TWINS (Fase E) y MEDA (Fase D)", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2016 – 2018.
- **Coll.**, "ESP2015-68281-C4-1-R: Ciencia y tecnología de instrumentos espaciales para la caracterización del ambiente marciano en múltiples misiones de NASA: REMS, TWINS y MEDA. Fase C/D", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2016 – 2017.
- **Coll.**, "ESP2014-54256-C4-1-R", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2015.

## Profession Activities and Service

### Advisory Committees

- Member of the Mars Exploration Program Analysis Group Goals Committee, 2023.

### Editorial Activities

- Associate Editor of JGR-Planets, 2020 – *present*.
- Translator of LPI's Planetary News into Spanish, 2019 – 2023.
- Guest Associate Editor of JGR-Planets for special collection, 2019.

### Review Panels

- Panelist and Proposal Reviewer for NASA's MDAP, SSW, FINESST, HW, EXOB, ICAR and PS Programs, and several Europlanet Programs.
- Group Chief for 2 NASA Programs.
- External Reviewer for NSF and National Programs in Chile and Italy.

### PhD Committee Activity

- PhD Thesis External Reviewer for Carlos Gary Bicas, 2023.  
Title: Thermal Infrared Perspectives of Subsurface, Surface and Surface-to-Atmosphere Phenomena on Mars. Institution: Stony Brook University, USA.
- PhD Thesis External Reviewer for Laura M. Parro, 2020.  
Title: Mars and Europa: Analysis of its thermal state, structure and internal evolution. Institution: Universidad Complutense de Madrid, Madrid, Spain.
- PhD Thesis External Reviewer for Hao Chen-Chen, 2019.  
Title: Study of Martian dust aerosol with Mars Science Laboratory Rover engineering Cameras. Institution: Universidad del País Vasco, Spain.
- PhD Thesis Advisory Committee Member for Iñaki Ordóñez-Etxeberría, 2018.  
Title: Meteorología de la atmósfera de Marte durante la misión Mars Science Laboratory: Dust devils y tormentas de polvo. Institution: Universidad del País Vasco, Spain.
- PhD Thesis Advisory Committee Member for Erik Fischer, 2018.  
Title: Experimental Study of the Formation of Liquid Saline Water on Mars. Institution: University of Michigan, USA.
- PhD Thesis Advisory Committee Member for Deepak Singh, 2016.  
Title: Radiative Impact of Cryosphere on the Climate of Earth and Mars. Institution: University of Michigan, USA.

### Conferences

- Chair of the session "The Inner Solar System", AGU Fall meeting, 2022.
- Organizational Committee Member of the 51<sup>st</sup> and 52<sup>nd</sup> Lunar and Planetary Science Conference, 2020 and 2021.
- Chair of the session "Atmospheres: Dynamics, Evolution, and Composition", 52<sup>nd</sup> Lunar and Planetary Science Conference, 2021.

- PhD Candidates Committee Member, Climate and Space Sciences and Engineering, University of Michigan, 2014 – 2019.
- Chair of the session "Mars Atmosphere", 49<sup>th</sup> Lunar and Planetary Science Conference, 2018.
- Chair of the session "The Dynamical Martian Atmosphere", Division for Planetary Sciences and European Planetary Science Congress, 2016.

### Referee for Journals

- Nature Astronomy, Space Science Reviews, Reviews of Geophysics, Scientific Reports, Geophysical Research Letters, Journal of Geophysical Research, Icarus, Quarterly Journal of the Royal Meteorological Society, Astrobiology, Planetary and Space Science, AAS' Planetary Science Journal, Advances in Space Research, Monthly Notices of the Royal Astronomical Society, Canadian Journal of Physics, and Geoscientific Instrumentation, Methods and Data Systems, among others.

### White Papers in the NASA Planetary Science and Astrobiology Decadal Survey 2023-2032

- E.G. Rivera-Valentín, **G. M. Martinez**, J. Filiberto, K. Lynch, V.F. Chevrier, R.V. Gough, M. Tolbert, J. Hanley, K.M. Primm, A. Soto, and D. Stillman. Resolving the Water Cycle on a Salty Mars: Planetary Science and Astrobiology Exploration Strategies for the Next Decade.
- S. Guzewich et al., including **G. M. Martinez**. Measuring Mars Atmospheric Winds from Orbit.
- C. E. Newman et al., including **G. M. Martinez**. Toward more realistic simulation and prediction of dust storms on Mars.
- I. B. Smith et al., including **G. M. Martinez**. A Case for Mars Polar Science in the Solar System.

### Teaching

- **CLASP 749: Climate and Space Sciences Seminar**, Fall 2016 and Winter 2017.  
1 credit graduate upper-level course, University of Michigan.
- **AOSS 350: Atmospheric Thermodynamics**, Winter 2013 and 2014.  
4 credit undergraduate upper-level course, University of Michigan.
- **Climate Risks and Environmental Impacts**, 2010.  
M.S. course offered by the Spanish Meteorology Agency, Spain.
- **Physics and Chemistry**, 2007.  
High School introductory course, Murcia, Spain.

### Mentoring

#### PhD Advisor

- Erik Fischer, University of Michigan, 2014 – 2018.  
Published 3 articles in top journals under my supervision. Currently, Assistant Research at the University of Michigan.
- Álvaro Vicente Retortillo, Universidad Complutense de Madrid, 2014 – 2017.

Published 2 articles in top journals under my supervision. Currently, Postdoctoral Researcher at Centro de Astrobiología in Madrid, Spain.

### Postdoctoral Advisor

- Erik Fischer, University of Michigan, 2020 – *present*.  
Published 1 article in a top journal under my supervision.
- **Hartzel Gillespie**, Lunar and Planetary Institute, Sep 2021 – June 2023.  
1 article in preparation. Currently, Researcher at JPL.
- Álvaro Vicente Retortillo, University of Michigan, 2017 – 2019.  
Published 2 articles in top journals under my supervision.

### Graduate and Undergraduate Mentor

- Anja Sheppard, University of Michigan, June 2023 – *present*.  
Funded to help in surface operations of the Mars 2020 Perseverance rover.
- Ariana Bueno, University of Michigan, July 2021 – *present*.  
Funded to help in surface operations of the Mars 2020 Perseverance rover.
- **Pragya Raghav**, Aligarh Muslim University, 2023.  
LPI Summer Internship; Investigation to be submitted to LPSC 2024.
- **Antonio Joaquín Segura-García**, Pompeu Fabra, Spain 2022.  
Master's Advisor; Thesis: Unsupervised Machine Learning Models of Mars Subsurface Neutrons Emissions. Presented work at AGU 2020.
- **Jacob Gambrill**, Embry–Riddle Aeronautical University, 2022.  
LPI Summer Internship; Investigation presented in LPSC 2023; Currently, graduate student at Texas A&M.
- **Simon Mendenhall**, University of South Florida, 2021.  
LPI Summer Internship; Investigation presented in LPSC 2022; Currently, graduate student at UT San Antonio Physics/SwRI.
- Cauê Borlina, University of Michigan, 2013 – 2016.  
Co-authored 2 articles as an undergraduate student under my supervision. Currently, Blaustein Postdoctoral Fellow at Johns Hopkins University.

### Honors and Awards

- **NASA's Mars 2020 Prelanding Strategic Science, Group Achievement Award, 2023.**  
For outstanding contributions to the strategic science effort that maximized the scientific return of the early Mars 2020 surface mission and sample collection.
- **NASA's Mars 2020 MEDA instrument, Group Achievement Award, 2023.**  
For outstanding achievements in the development and successful operation of the MEDA instrument that enables unique environmental studies on Mars.
- **NASA's Mars 2020 Atmospheric Science Team, Group Achievement Award, 2023.**  
For multi-instrument observations to understand Mars' dust cycle, and provide environmental context for engineering and sampling, during the COVID-19 pandemic.
- **NASA's Mars 2020 Instrument Operations Team, Group Achievement Award, 2021.**  
For outstanding achievements in instrument operations development activities.

- **USRA Spot Award**, 2021.  
For exceptional work supporting Lunar and Planetary Institute Education and Public Engagement.
- **Spanish La7 TV "Premios Fénix" Award**, 2019.  
Given to individuals from La Región de Murcia, Spain, who have excelled in cultural, scientific, social, sport and musical spheres in an exemplary and meritorious manner.
- **Cadena SER "Calle Radio Murcia" Award**, 2018.  
Spain's prime radio network award given to individuals who have excelled in cultural, scientific, or technical spheres in an exemplary and meritorious manner.
- **NASA's Mars Science Laboratory** extended mission, Group Achievement Award, 2017.
- **NASA's Mars Science Laboratory** mission, Group Achievement Award, 2015.
- **UCM-EEA Abel Predoc Grant**, European Economic Area, 2010.
- **Universidad Complutense de Madrid "Exención de tasas" Award**, 2005 and 2006  
Fellowship covering full tuition for the PhD program. Awarded to 5% of applicants.
- **High School Graduation Award** as best student, Murcia, Spain, class 1995.

### Invited Talks (excluding conferences)

- Universidad Complutense de Madrid, Summer Course, Ages of Mars, 2022.
- Johnson Space Center Astronomical Society, TX, 2021.
- Texas A&M, Geology and Geophysics Society, TX, 2019.
- Lunar and Planetary Institute/USRA, TX, 2019.
- JPL/Caltech, Pasadena, CA, 2018.
- Southwest Research Institute, Boulder, CO, 2017.
- American Institute of Aeronautics and Astronautics at the University of Michigan, 2015.
- Centro de Astrobiología, Madrid, Spain, 2013.
- Geophysical Institute, University of Bergen, Bergen, Norway, 2010.
- National Renewable Energy Center (CENER), Pamplona, Spain, 2010.
- Facultad de Matemáticas, Universidad Complutense de Madrid, Madrid, Spain, 2009.
- Istituto Nazionale di Astrofisica Osservatorio di Capodimonte, Naples, Italy, 2009.
- Finnish Meteorological Institute, Helsinki, Finland, 2007.

### Media Coverage (selected)

- Quoted in [Radio Televisión Española](#) and highlighted in [USRA News](#) on co-authored investigation published in *Nature Geoscience* about the meteorology of NASA's Mars 2020 landing site, 2023.
- Quoted in [CBS News](#), [AlJazeera](#), [Smithsonian Magazine](#), [ABC News](#), [Los Angeles Times](#), [TeleMundo](#), [Univision](#), etc, on co-authored investigation published in *Nature Communications* about the sound of dust devils on Mars, 2022.
- Quoted in [Universe Today](#), [ScienceDaily](#), and [PR Newswire](#) and highlighted in [USRA News](#) on co-authored investigation published in *PNAS* about dust storms and energy imbalance on Mars, 2022.

- Highlighted by [EuroPlanet Media](#) and quoted in [Phys.org](#), [Infobae](#) and [Europa Press](#) (among others) on contribution sent to the European Planetary Science Conference about future human exploration of Mars, 2021.
- Quoted in Spain's national ([ABC](#)) newspaper on Mars 2020 Helicopter, 2021.
- Wrote a column for Spain's national ([ABC](#)) newspaper on first results of the Mars 2020 mission, 2021.
- Quoted in Spain's national ([ABC](#)) newspaper on Mars 2020 Helicopter, 2021.
- Interviewed in Spain's regional radio network ([Onda Regional de Murcia](#)) on NASA's exploration of Mars, 2021.
- Interviewed by Hispanic TV channels ([Univisión Chicago](#), [Telemundo 51 Miami](#), [Cuatro TV España](#)), Radio stations ([FM RCN Colombia](#)), and press ([ABC España](#)) on the flight of the helicopter (Ingenuity) onboard the Mars 2020 mission, 2021.
- Interviewed by Hispanic TV channels ([Noticias Telemundo y Univision Nueva York](#)), Radio stations (e.g., [Radio Nacional de España](#)), and featured by [NASA en español](#) on the Mars 2020 mission landing, 2021.
- Interviewed in Spain's national ([ABC](#)) and regional ([La Verdad](#)) newspapers on the Mars 2020 mission, 2020.
- Quoted in Spain's national newspaper ([El Español](#)) as one of the most influential people born in Murcia, Spain, 2020.
- Interviewed by [Accuweather Inc.](#) on the weather on Mars and its predictability, 2020.
- Interviewed in [ScienceNews](#) on how NASA's Mars 2020 mission will help predict dust storms on Mars, 2020.
- Quoted in [Nature Astronomy](#), [Astrobiology](#), [PR Newswire](#) and Spanish TV channel "[La Sexta](#)" on the habitability potential in Martian brine, 2020.
- Interviewed in [New Scientist](#) on current water on Mars and the expected challenges in future human exploration of the Red Planet, 2020.
- Interviewed and quoted in [National Geographic](#) on involvement in a study of oxygen on Mars, 2019.
- Results of NASA's MDAP project (Recalibration and Analysis of the Phoenix Mission's Thermal and Electrical and Conductivity Probe (TECP) Relative Humidity Data) advertised on the [Astrobiology webpage of NASA](#), 2019.
- Quoted in [PBS Nova](#), [Chemistry World](#), and [MIT Technology Review](#) on a paper published in [Nature Astronomy](#) about Martian habitability, 2019.
- Interviewed in Spain's national newspaper ([El Español](#)) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's national tech magazine ([Nobbot](#)) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's national prime radio network ([Cadena SER](#)) on involvement in NASA's exploration of Mars, 2018.
- Quoted in Spain's national newspaper ([20 Minutos](#)) on award given by Spain's premier radio network Cadena SER "Calle Radio Murcia", 2018.
- Interviewed in Spain's regional newspapers ([Grupo Vocento](#)) on involvement in NASA's exploration of Mars, 2018.

- Interviewed in Spain's regional newspaper ([La Verdad](#)) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's regional radio network ([Onda Regional de Murcia](#)) on involvement in NASA's exploration of Mars, 2018.
- Quoted in Spain's regional radio ([Radio Euskadi](#)) on involvement in NASA's Mars 2020 mission, 2017.
- Interviewed and quoted in a [NASA's press release](#) on Seasonal Cycles in Curiosity's First Two Martian Years, 2016.
- Quoted in [Astronomy](#), [Phys.org](#), and [Scientific American](#) on Mars Curiosity Rover's findings, 2016.
- Former PhD Student quoted in Spain's national newspaper ([La Vanguardia](#)) on research about a new Martian radiative model, 2015.
- Quoted in Spain's national ([ABC](#)) and regional ([La Verdad](#)) newspapers on research about water on Mars, 2014.

## Outreach

- Wrote a blog for [Eos](#), a science news magazine published by AGU, about the InSight Lander on Mars, 2023.
- Wrote a blog for [Eos](#), a science news magazine published by AGU, about the first flights of a helicopter on another planet (Mars), 2023.
- Invited speaker at "[Alcanzando Las Estrellas](#)", a webinar in Spanish about Planetary Science and career paths. Title "A los Mandos del Perseverance".
- Wrote a blog for [Eos](#), a science news magazine published by AGU, about the relation between ozone, water vapor, and temperatures as measured by TGO, 2022.
- Invited speaker at "[The Road to Mission Science: Seminars for Students and Early Career Researchers](#)", focused on how to get involved in current planetary missions, 2022.
- Wrote a blog for [Eos](#), a science news magazine published by AGU, about the mystery of Methane on Mars, 2022.
- Wrote a blog for [Eos](#), a science news magazine published by AGU, about the thermal properties of Martian soil as measured by the InSight lander, 2021.
- Invited by **NASA en Español** during the landing of the Perseverance Mars 2020 rover to answer questions in social media, 2021.
- Motivational talk on the Mars 2020 mission given to the *Instituto Alfonso X el Sabio* High School, Murcia, Spain, 2021.
- Motivational talk on the Exploration of Mars given to the scholar association *Talentos-Altas Capacidades Intelectuales Región de Murcia*, Murcia, Spain, 2021.
- Invited speaker on "Follow Perseverance to Mars!" live webcast organized by the STAR Library Network's *NASA@ My Library* program in partnership with the Lunar and Planetary Institute, the American Library Association, and the American Museum of Natural History, 2020. [Live webcast](#) and [flyer](#).
- Interviewed by College of Dupage's student newspaper *The Courier* on NASA's Mars 2020 mission, 2020.



- Invited Speaker on the Space Exploration Educator's Conference (SEEC) program aimed at pairing SEEC Crew members with Space Exploration Experts to help educators develop new lessons and activities, 2020.
- Pasadena Public Library, Pasadena, TX. Invited talk on Space Exploration to celebrate the Hispanic Heritage Month, 2019.

## Journal Publications (see last page for a summarizing Table)

### In Preparation

+20 articles with title and list of authors.

### In Review

4. Abdelmoneim, N., D. Dhuri, D. Atri, and **G. M. Martínez**, Interpretable Machine Learning for Modeling Relative Humidity: Expanding Mars Climate Modeling, *Planetary Science Journal* (in review), 2023.
3. Harri, A.-M., M. Paton, M. Hieta, J. Polkko, C. Newman, J. Pla-Garcia, J. Leino, T. Määkinen, J. Kauhanen, I. Jaakonaho, A. Sanchez-Lavega, R. Hueso, M. Genzer, R. Lorenz, M. Lemmon, A. Vicente-Retortillo, L. K. Tamppari, D. Viudez-Moreiras, M. de la Torre-Juarez, H. Savijärvi, J. A. Rodríguez-Manfredi, and **G. M. Martínez**, Perseverance MEDA Atmospheric Pressure Observations - Initial Results. *Journal of Geophysical Research: Planets* (in review), 2023.
2. Zorzano, M.-P., **G. M. Martínez**, J. Polkko, L. Tamppari, C. Newman, H. Savijärvi, Y. Goreva, D. Viudez, T. Bertrand, M. Smith, E. M. Hausrath, S. Siljeström, K. Benison, T. Bosak, A. D. Czaja, V. Debaille, C. D. K. Herd, L. Mayhew, M. A. Sephton, D. Shuster, J. I. Simon, B. Weiss, N. Randazzo, L. Mandon, A. Brown, M. H. Hecht, J. Martínez-Frías, Present-day thermal and water activity environment of the Mars Sample Return collection, *Nature Astronomy* (in review), 2023.
1. Weintraub, A., C. Edwards, L. Edgar, A. Vasavada, **G. M. Martínez**, A. Ahern, Verifying a method to determine thermophysical heterogeneity in planetary surfaces: Comparing orbital observations with ground truth from the Curiosity rover, *Journal of Geophysical Research: Planets* (in review), 2023.

### Published

81. Pankine, A. A., C. Leung, L. Tamppari, **G. M. Martínez**, M. Giuranna, S. Piqueux, M. Smith, A., Trokhimovskiy, Observations of Effects of Global Dust Storms on Water Vapor in the Southern Polar Region of Mars. *Journal of Geophysical Research: Planets* (in press), 2023.
80. Hausrath, E. M., R. Sullivan, Y. Goreva, M. P. Zorzano, A. Vaughan, A. Cousin, S. Siljeström, S. Sharma, A. Shumway, T. Kizovski, S. VanBommel, M. Tice, A. Knight, **G. M. Martínez**, A. de Vicente-Retortillo, L. Mandon, C. T. Adcock, J. M. Madariaga, I. Población, J. R. Johnson, J. Lasue, O. Gasnault, N. Randazzo, E. Cardarelli, R. Kronyak, A. Bechtold, G. Paar, A. Udry, O. Forni, C. C. Bedford, N. A. Carman, J. F. Bell III, K. Benison, T. Bosak, A. Brown, A. Broz, F. Calef, B. Clark, A. D. Czaja, T. Fouchet, T. S. J. Gabriel, M. Golombek, F. Gomez, C. D. K. Herd, K. Herkenhoff, R. S. Jakubek, L. Jandura, J. Martinez-Frias, L.E. Mayhew, F. Poulet, P. Russell, M. Sephton, D. Shuster, J. I. Simon, I. Tirona, R. C. Wiens, B. Weiss, A. Williams, K. Williford, Z. U. Wolf, and the Regolith Working Group. Collection and in situ analyses of regolith samples

by the Mars 2020 rover: Implications for formation and alteration history. *Journal of Geophysical Research: Planets* (in press), 2023.

79. Chipera, S. J., D. T. Vaniman, E. B. Rampe, T. F. Bristow, **G. M. Martínez**, V. M. Tu, T. S. Peretyazhko, A. S. Yen, R. Gellert, J. A. Berger, W. Rapin, R. V. Morris, D. W. Ming, L. M. Thompson, S. Simpson, C. N. Achilles, B. Tutolo, R. T. Downs, A. A. Fraeman, E. Fischer, D. F. Blake, A. H. Treiman, S. M. Morrison, M. T. Thorpe, S. Gupta, W. E. Dietrich, G. Downs, N. Castle, P. I. Craig, D. J. Des Marais, R. M. Hazen, A. R. Vasavada, E. Hausrath, P. Sarrazin, J. P. Grotzinger, Crystallographic Investigation of Mg-sulfate at Gale Crater, Mars. *Journal of Geophysical Research: Planets* (in press), 2023.
78. Leung, C. W. S., L. K. Tamppari, D. Kass, **G. M. Martínez**, E. Fischer, M. Smith, Seasonal Vertical Water Vapor Distribution at the Mars Phoenix Lander Site, *Icarus* (in press), 2023.
77. Pla-García, J., A. Munguira, S. Rafkin, C. Newman, T. Bertrand, **G. M. Martínez**, R. Hueso, A. Sánchez-Lavega, T. del Río Gaztelurrutia, A. Stott, N. Murdoch, B. Chide, M. de la Torre Juárez, M. Lemmon, D. Viúdez-Moreiras, H. Savijarvi, M. Richardson, M. Marín, E. Sebastián, A. Lepinette-Malvitte, L. Mora and J.A. Rodríguez-Manfredi, Nocturnal turbulence at Jezero crater, as determined from MEDA measurements and modeling, *Journal of Geophysical Research: Planets* (in press), 2023.
76. Toledo, D., L. Gomez, V. Apestigue, I. Arruego, M. Smith, A. Munguira, **G. M. Martínez**, P. Patel, A. Sanchez-Lavega, M. Lemmon, and others, Twilight mesospheric clouds in Jezero as observed by MEDA Radiation and Dust Sensor (RDS), *Journal of Geophysical Research: Planets* (in press), 2023.
75. Torre Juárez, M., A. Chavez, L. K. Tamppari, A. Munguira, **G. M. Martínez**, R. Hueso, B. Chide, N. Murdoch, A. Stott, S. Navarro, A. Sánchez-Lavega, G. S. Orton, D. Viúdez, D. Banfield, J. A. Rodríguez-Manfredi, Diurnal cycle of air temperature fluctuations at Jezero crater, *Journal of Geophysical Research: Planets*, 128(7), e2022JE007458, 2023.
74. Chide, B., X. Jacob, A. Petculescu, R. D. Lorenz, S. Maurice, F. Seel, S. Schröder, R. C. Wiens, M. Gillier, N. Murdoch, N. Lanza, T. Bertrand, P. Pilleri, D. Mimoun, M. de la Torre Juarez, R. Hueso, A. Munguira, A. Sánchez-Lavega, **G. M. Martínez**, C. Larmat, J. Lasue, C. Newman, J. Pla-Garcia, P. Bernardi, A-M. Harri, M. Genzer, A. Lepinette, Measurements of sound propagation in Mars' lower atmosphere, *Earth and Planetary Science Letters*, 615, 118200, 2023.
73. Stott, A. E., N. Murdoch, M. Gillier, D. Banfield, T. Bertrand, B. Chide, M. de la Torre-Juárez, R. Hueso, R. Lorenz, **G. M. Martínez**, A. Munguira, L. Mora-Sotomayor, S. Navarro, C. Newman, P. Pilleri, J. Pla-García, J. A. Rodríguez-Manfredi, A. Sánchez-Lavega, M. Smith, D. Viúdez Moreiras, N. Williams, S. Maurice, R. C. Wiens, and D. Mimoun, Wind and turbulence observations with the Mars microphone on Perseverance, *Journal of Geophysical Research: Planets*, 128.5: e2022JE007547, 2023.
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## Languages

- Spanish: Native language.
- English: Fluent level at speaking, reading, and writing.
- German: Intermediate level at speaking, reading, and writing.
- Italian: Basic level at speaking and reading.

**Table.** Summary of publication record of German Martinez sorted by Impact Factor. H-Index and Quartile are retrieved from [here](#), while the Impact Factor is retrieved from [here](#). My position in the list of authors of each article is shown in the last column. For instance, 8/42 means that I was eighth author on an article with 42 contributors.

Journal	Impact Factor	H Index	Quartile	# of Articles Published	Position in list of authors
<i>Nature Communication</i>	15.41	446	Q1	1	6/24
<i>Science</i>	14.90	1283	Q1	1	8/42
<i>Nature Geoscience</i>	13.29	243	Q1	2	5/67; 3/9
<i>Science Advances</i>	13.01	214	Q1	1	7/54
<i>Quarterly Journal of the Royal Meteorological Society</i>	9.82	157	Q1	1	<b>1/3</b>
PNAS	9.68	838	Q1	1	7/7
<i>Space Science Reviews</i>	9.49	169	Q1	6	<b>1/2; 1/16; 2/15; 3/12; 13/30; 34/64</b>
<i>Nature Astronomy</i>	6.47	71	Q1	1	4/4
<i>Measurement</i>	6.34	115	Q1	2	2/7; 3/6
<i>Earth and Planetary Science Letters</i>	5.47	276	Q1	2	11/15; 19/27
<i>Geophysical Research Letters</i>	5.25	305	Q1	8	2/5; 2/4; 2/6; 4/25; 4/11; 5/9; 7/21; 9/21
<i>Journal of Geophysical Research-Planets</i>	4.72	163	Q1	27	<b>1/11; 1/15; 1/34; 2/19; 2/11; 2/3; 2/5; 4/15; 4/6; 5/6; 5/9; 5/6; 5/15/; 5/27; 5/22; 5/9; 5/27; 6/21; 7/19; 7/11; 10/24; 10/31; 11/28; 13/19; 30/47; 5/35; 14/60</b>
<i>Scientific Reports</i>	4.44	282	Q1	1	2/9
<i>Sensors</i>	4.42	219	Q2	1	41/45
<i>Astrobiology</i>	4.26	95	Q2	2	2/3; 9/11
<i>Acta Astronautica</i>	3.93	97	Q1	1	2/6
<i>Journal of Space Weather and Space Climate</i>	3.27	39	Q2	1	4/4
<i>Life</i>	3.23	46	Q2	1	3/4
<i>Icarus</i>	3.16	164	Q1	9	<b>1/3; 1/15; 2/4; 2/4; 2/7; 4/5; 6/8; 12/17; 4/6</b>
<i>Journal of the Atm. Sciences</i>	3.1	184	Q1	2	<b>1/3; 1/3</b>
<i>American Mineralogist</i>	2.97	151	Q1	1	2/19
<i>Planetary Science Journal</i>	2.93	14	Q1	1	3/6
<i>Planetary and Space Science</i>	2.5	100	Q2	2	2/9; 10/16
<i>Solar System Research</i>	0.95	29	Q3	1	<b>1/4</b>
<i>Others: DYNA</i>	NA	NA	NA	1	3/5
<i>Others: Física de la Tierra</i>	NA	NA	NA	2	<b>1/6; 3/6</b>