

# German Martinez

## Curriculum Vitae: March 2025

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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

- **Profesor de Investigación**, *Centro de Astrobiología, Spain*, Sept 2024 – present.
- **Manager and Sr. Scientist**, *Lunar and Planetary Institute, USA*, Sept 2022 – Aug 2024.
- **Staff Scientist**, *Lunar and Planetary Institute, USA*, July 2019 – Aug 2022.
- **Adjunct Associate Research Scientist**, *University of Michigan, USA*, July 2019 – present.
- **Assistant Research Scientist**, *University of Michigan, USA*, Jan 2013 – June 2019.
- **Postdoctoral Research Fellow**, *University of Michigan, USA*, 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 Politécnica 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: Deputy PI of the MEDA environmental suite; Co-lead of the Atmospheric Working Group; Science co-lead of MEDA's Thermal and Infrared sensor.
- **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

- Started new job on Sept 2<sup>nd</sup>, 2024, in Madrid, Spain.

### Past

- **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. Walter Kieffer, 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.
- **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.**, "*Caracterización de los ciclos del polvo y del agua en el sistema climático marciano*", Ministerio de Ciencia e Innovación, Spain; PI: Daniel Toledo Carrasco, 2022.
- **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.
- Coll., “A Miniature Sensor for Measuring Soil Wetness and Searching for Brines on Mars and Beyond”, NASA Exobiology Program; PI: N. O. Renno, 10/01/12 – 7/31/19.

## 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 3 NASA Programs.
- External Reviewer for NSF and National Programs in Chile and Italy.

### PhD Committee Activity

- PhD Thesis Advisory Committee Member 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-Etxeberria, 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

- Organizational Committee Member of the 51<sup>st</sup>, 52<sup>nd</sup>, 55<sup>th</sup>, and 56<sup>th</sup> Lunar and Planetary Science Conference, 2020, 2021, 2024, and 2025.
- Chair of the session “Dynamics and Processes in the Martian Atmosphere”, The Tenth International Conference on Mars, 2024.
- Chair of the session “The Inner Solar System”, AGU Fall meeting, 2022.
- 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, Communications Earth & Environment, 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

- **Alejandro Salinas Sola**, Universidad Alcalá de Henares, Madrid, Spain, Feb 2025 – *present*  
Bachelor's Thesis entitled 'Acoplamiento Energético Superficie-Atmósfera en Marte'.
- **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)

- Planetary Exploration Workshop, Saariselkä, Finland, 2024.
- MIT Department of Earth, Atmospheric, and Planetary Sciences, Cambridge, MA, 2024.
- JPL/Caltech, Pasadena, CA, 2024.
- 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 Spain's national ([ABC](#)) newspaper on Mars Human Exploration, 2024.
- 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 a unified model to calculate evaporation rates on rocky bodies with atmospheres, 2024.
- Middle School Escola Mestral, Vilanova de la Barca, Catalunya, Spain. Invited talk on Space Exploration, 2024.
- 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 ([h/i10-index = 33/61](#); [Google scholar](#))

### In Preparation

+10 articles with title and list of authors.

### In Review

5. Vicente-Retortillo, A., **G. M. Martínez**, C. E. Newman, M. T. Lemmon, J. R. Johnson, E. L. Mason, N. O. Renno and J. A. Rodríguez-Manfredi, Dust Lifting and Deposition over six Mars Years at Gale Crater, Mars, from REMS Observations and Mesoscale Simulations. *Journal of Geophysical Research: Planets* (in review), 2025.
4. de la Torre Juárez, M., S. D. Guzewich, E. L. Mason, J. M. Battalio, C. E. Newman, **G. M. Martínez**, S. Zurita Zurita, S. J. VanBommel, T.H. McConnochie, Mars surface landers observe contemporaneous changes in atmospheric composition and Hadley circulation, *Geophysical Research Letters* (in review), 2025.
3. Sebastián, E., **G. M. Martinez**, M. D. Smit, V. Peinado, L. Mora, Á. de Vicente-Retortillo, and J. A. A. Rodríguez-Manfredi, Model update and surface operation performance of the MEDA-TIRS radiometer onboard NASA’s Mars2020 Perseverance rover, *Space Science Reviews* (in review), 2025.
2. Hieta, M., I. Jaakonaho, J. Polkko, H. Savijärvi, M. Genzer, A.-M. Harri, A. Lorek, S. Garland, J.-P. de Vera, **G. M. Martínez**, E. Fischer, E. Sebastián, J. A. Rodríguez-Manfredi, L. Tamppari, M.

de la Torre Juárez, T. McConnochie, REMS-H Revisited: Updated calibration and results of the humidity sensor of the MSL Curiosity, *Space Science Reviews* (in review), 2025.

1. Chide, B., R. D. Lorenz, F. Montmessin, S. Maurice, Y. Parot, R. Hueso, **G. M. Martínez**, A. Vicente-Retortillo, X. Jacob, M. Lemmon, B. Dubois, P.-Y. Meslin, C. Newman, T. Bertrand, G. Deprez, D. Toledo, A. Sánchez-Lavega, A. Cousin, R. C. Wiens, Sparks on Mars: detection of triboelectric discharges during dust events, *Nature* (in review), 2025.

## Published

94. Sánchez-Lavega, A., E. Larsen, T. del Rio-Gaztelurrutia, J. Hernández-Bernal, I. Ordóñez-Etxebarría, R. Hueso, B. Tanguy, M. Lemmon, M. de la Torre Juárez, **G. M. Martínez**, A. Munguira, J. A. Rodríguez-Manfredi, A.-M. Harri, J. Pla-García, D. Toledo, Martian atmospheric disturbances from orbital images and Surface pressure at Jezero Crater, Mars, during Martian Year 36. *Journal of Geophysical Research: Planets*, 130.1, e2024JE008565, 2025.
93. Sebastián, E., **G. M. Martínez**, M. Ramos, M. D. Smith, V. Peinado, L. Mora<sup>1</sup>, M. T. Lemmon, A. Vicente -Retortillo, J. de Lucas, R. Ferrandiz, and José A. Rodríguez-Manfredi, In-flight calibration of the MEDA-TIRS instrument onboard NASA's Mars2020 mission. *Acta Astronautica*, 226, 791-802, 2025.
92. Smith, M. D., **G. M. Martínez**, E. Sebastián, M. T. Lemmon, S. A. Atwood, D. Toledo, D. Viúdez-Moreiras, A. Stcherbinine, J. A. Rodríguez-Manfredi, M. de la Torre Juárez, The diurnal variation of dust and water ice aerosol optical depth at Jezero Crater observed by MEDA/TIRS over a full Martian year. *Icarus* 425, 116313, 2025.
91. 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*, 130.2, e2023JE008046, 2025.
90. Guan, L., E. Creecy, X. Jiang, X. Wang, **G. M. Martínez**, A. Toigo, M. Richardson, A. Sánchez-Lavega, Distinct Energy Budgets of Mars and Earth. *AGU Advances*, 5(6), e2024AV001389, 2024.
89. Toledo, D., P. Rannou, V. Apestigue, R. Rodriguez, I. Arruego, **G. M. Martínez**, L. Tamppari, A. Munguira, R. Lorenz, F. Montmessin, A. Sanchez-Lavega, P. Patel, M. Smith, M. Lemmon, A. Vicente-Retortillo, C. Newman, D. Viudez-Moreiras, R. Hueso, M. Yela, M. de la Torre Juárez, and J. A. Rodríguez-Manfredi, Drying of the Martian mesosphere during aphelion induced by lower temperatures. *Communications Earth & Environment*, 5 (1), 2024.
88. Jackson, B., L. Fenton, T. Brown, A. Munguira, **G. M. Martínez**, C. Newman, D. Viudez-Moreiras, M. Golombek, R. Lorenz, M. D. Paton, and D. Conway, Profiling Near-Surface Winds

- on Mars Using Attitude Data from Mars 2020 Ingenuity. *Planetary Science Journal*, 6(1), 2024.
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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.