Germán Martínez
Curriculum Vitae: January 2023

Contact and Background Information

Lunar and Planetary Institute,
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Houston, TX 77058

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Nationality: US-American and Spanish

Education

Ph.D. (summa cum laude), **Universidad Complutense de Madrid**, Spain, 2010
Thesis: "Characterization of the Martian Planetary Boundary Layer"

Certificado de Aptitud Pedagógica (~M.Ed.), **Universidad Complutense de Madrid**, Spain, 2007

M.S., Atmospheric Sciences, **Universidad Complutense de Madrid**, Spain, 2007

B.S., Physics, **Universidad Complutense de Madrid**, Spain, 2005

Appointments

Manager and Senior Scientist, **Lunar and Planetary Institute**, Universities Space Research Association, 09/2022-present

Staff Scientist, **Lunar and Planetary Institute**, Universities Space Research Association, USA, 07/2019-08/2022

Adjunct Research Scientist, **University of Michigan**, USA, 07/2019-present

Assistant Research Scientist, **University of Michigan**, USA, 2013-06/2019

Postdoctoral Research Fellow, **University of Michigan**, USA, 2011-2013

Visiting Scientist, **University of Bergen**, Norway, 2010-2011

Research Assistant, **Universidad Complutense de Madrid**, Spain, 2009-2010

Research Assistant, **Arquimea Ingeniería, S.L.**, Spain, 11/2007-10/2008

Research Assistant, **Universitat Politécnica de Catalunya**, Spain, 08/2007-10/2007

Research Assistant, **Instituto Nacional de Técnica Aeroespacial**, Spain, 09/2005-07/2007

Mission Participation

NASA Mars 2020, Co-I of MEDA instrument, 2014-present. Science lead of MEDA's Thermal Infrared Sensor (TIRS) and co-lead of the ATM Working Group.

NASA Mars Science Laboratory, team member of REMS instrument, 2013-present. Responsible for the curation of REMS UV fluxes.

NASA Mars Phoenix, led the recalibration of MECA/TECP instrument, 2019

Awarded Grants

PI, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA), Phase D/E", Jet Propulsion Laboratory, 10/1/19 - 9/30/23.

PI, "MSL Science Operations: Supporting REMS", University of Michigan through Jet Propulsion Laboratory, 10/1/19 - 9/30/23.

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 Grants

PI, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA)", Jet Propulsion Laboratory, 10/29/14 - 6/30/19.

PI, "Generation of UV Radiation Data Products at Gale Crater by correcting REMS UV Data from Dust Deposition and Sensor's Angular Response", Planetary Data Archiving, Restoration, and Tools. Not Awarded by PDART, but fully funded internally by NASA's MSL mission. 6/1/2017/ - 7/31/2019.

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.

Honors and Awards

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, technical, or humanitarian 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, 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

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 and Universidad Complutense de Madrid, Spain

Physics and Chemistry, 2007
High School introductory course, Murcia, Spain

Mentoring

Undergrad Mentor at LPI Summer Internship, Jacob Gambrill, 2022
Embry–Riddle Aeronautical University, USA

Master's Advisor, Antonio Joaquín Segura-García, 2022
Pompeu Fabra University, Barcelona, Spain

Undergrad Mentor at LPI Summer Internship, Simon Mendenhall, 2021
University of South Florida, USA

PhD Advisor, Erik Fischer, 2018
University of Michigan, now Assistant Research Scientist at University of Michigan

PhD Advisor, Álvaro de Vicente Retortillo, 2017
Universidad Complutense de Madrid, Spain, now Postdoctoral Researcher at Centro de Astrobiología in Madrid, Spain

Undergraduate mentor, Cauê Borlina, 2013-2016
University of Michigan, now Blaustein Postdoctoral Fellow at Johns Hopkins University

Postdoctoral Advisor

Hartzel Gillespie, 2022-present
LPI/USRA

Erik Fischer, 2020-2021
University of Michigan

Álvaro de Vicente Retortillo, 2017-2019
University of Michigan

Memberships

American Geophysical Union (AGU), 2012-present

Service

Editorial Activities

Associate Editor of JGR-Planets, 2020-present

Translator of LPI's Planetary News into Spanish, 2019-present

Guest Associate Editor of JGR-Planets for special collection, 2019

Review Panels

Europlanet 2024 Research Infrastructure, Transnational Access Program, Call #3, 2022

Proposal reviewer for NASA's Exobiology Program, 2022

Panelist and Proposal reviewer for Europlanet 2024 Research Infrastructure, Transnational Access (TA) Programme, Call #2, 2021

Panelist and Proposal reviewer on 2 NASA ROSES PSP programs

Panelist and proposal reviewer for NASA's Earth and Space Science and Technology **(**FINESST**)** Program, 2020

Panelist and Proposal reviewer for Europlanet 2024 Research Infrastructure Transnational Access (TA) Programme, Call #1, 2020

Proposal reviewer for NASA's Habitable World Program, 2020

Proposal reviewer for Comisión Nacional de Investigación Científica y Tecnológica (CONICYT) de Chile, 2019

Proposal reviewer for Agenzia Spaziale Italiana (ASI) & Istituto Nazionale di Astrofisica (INAF), Sun, Solar System and Exoplanets Call, 2019

Panelist and proposal reviewer for Europlanet 2020 Research Infrastructure, Call #5, 2018

Panelist and proposal reviewer for Europlanet 2020 Research Infrastructure, Call #4, 2018

Proposal reviewer for NASA Solar System Workings Program, 2018

Reviewer for University of Michigan Engineering Graduate Symposium, 2017-2018

Proposal reviewer for NASA Earth and Space Science Fellowship Program, 2016-2017

Proposal reviewer for NSF Antarctic Earth Sciences Program, 2016
Panelist and proposal reviewer for NASA Mars Data Analysis Program, 2015

PhD Committee Activity

PhD Thesis External Reviewer for Laura M. Parro, 2020
Title: Mars and Europa: Analysis of its thermal state, structure and internal evolution.

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. 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. 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, 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. University of Michigan, USA

Data contributed to NASA PDS

Mars Phoenix MECA/TECP Derived Relative Humidity, 2019

Mars Science Laboratory REMS corrected UV fluxes, 2019, 2021, 2022

Conference

Organizational Committee Member of the 51st and 52nd Lunar and Planetary Science Conference, 2020 and 2021

Co-lead organizer of the 2nd Lunar and Planetary Institute – Open University Astrobiology workshop, February 2021

Contributed White Papers

Planetary Science and Astrobiology Decadal Survey (2023-2032):

4. Rivera-Valentín, E. G. et al. including **Martínez, G. M.**, Resolving the water cycle on a salty Mars: Planetary science and astrobiology exploration strategies for the next decade.

3. Smith, I. B. et al. including **Martínez, G. M.**, A Case for Mars Polar Science in the Solar System.

2. Guzewich. S. et al. including **Martínez, G. M.**, Measuring Mars Atmospheric Winds from Orbit.

1. Newman, C. E. et al. including **Martínez G. M.**, Toward more realistic simulation and prediction of dust storms on Mars.

Other

Chair of the session “The Inner Solar System”, AGU Fall meeting, 2022.

Chair of the session "Atmospheres: Dynamics, Evolution, and Composition", 52nd 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", 49th Lunar and Planetary Science Conference, 2018

Chair of the session "The Dynamical Martian Atmosphere", Division for Planetary Sciences and European Planetary Science Congress, 2016

Peer reviewer of 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

Invited Talks

Universidad Complutense de Madrid, Summer Course, Ages of Mars, 2022

Johnson Space Center Astronomical Society, TX, 2021

Invited Talk at the Lunar and Planetary Institute Science Council Meeting, 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

Refereed Journal Articles

(h/i10-index = 26/40; Google scholar; Underlined name = supervised postdoc, grad or undergrad. student)

79. Segura, A. J, **G. M. Martínez**, M. D. Smith et al., Seasonal variations of hydrogen content in the shallow subsurface of Mars: The Hellas Planitia case, *Icarus*, (in preparation), 2023.

78. **Martínez, G. M.**, R. V. Gough, W. Rapin, P.-Y. Meslin, O. Gasnault, S. Schröder, T. H. McConnochie, H. Savijärvi, E. Fischer, S. Guzewich, C. E. Newman, A. R. Vasavada, M. de la Torre-Juárez, R. Wiens, and N. Lanza, Frost Detection Campaigns by the Mars Science Laboratory Mission, *Journal of Geophysical Research: Planets* (in preparation), 2023.

77. Harri, A.-M., M. Hieta, J. Polkko, M. Paton, C. E. Newman, J. Pla-García, J. Leino, I. Jaakonaho, R. Hueso, A. Sánchez-Lavega, M. Genzer, R. Lorenz, M. Lemmon, A. Vicente-Retortillo, L. K. Tamppari, D. Viúdez-Moreiras, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, **G. M. Martínez**, Perseverance MEDA-PS Pressure Observations – Initial Results, *Journal of Geophysical Research: Planets* (in preparation), 2023.

76. 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* (under review), 2023.

75. 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* (under review), 2023.

74. 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* (under review), 2023.

73. 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* (under minor revisions), 2023.

72. 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, *JGR:Planets* (under review), 2023.

71. Vicente-Retortillo, A**., G. M. Martínez**, M. T. Lemmon, R. Hueso, J. R Johnson, R. Sullivan, C. E. Newman, E. Sebastián, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, A. Sánchez-Lavega, N. Murdoch, L. Mora-Sotomayor, T. Bertrand, L. K. Tamppari, M. de la Torre Juárez, and J.-A. Rodríguez-Manfredi, Dust Lifting Through Changes in Albedo at Jezero Crater, Mars, *Journal of Geophysical Research: Planets* (under review), 2023.

70. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre-Juárez, **G. M. Martínez**, C. E. Newman, E. Sebastián, A. Lepinette-Malvite, A. Vicente-Retortillo, B. Chide6, M. T. Lemmon, T. Bertrand, R. Lorenz, D. Banfield, J. Gómez-Elvira, J. Martín-Soler, S. Navarro, J. Pla-García, J. A. Rodríguez-Manfredi, J. Romeral, M. D. Smith, and J. Torres, Near Surface Atmospheric Temperatures at Jezero from Mars 2020 MEDA measurements, *Journal of Geophysical Research: Planets* (accepted), 2023.

69. Hausrath, E. M., C. T. Adcock, A. Bechtold, P. Beck, K. Benison, A. Brown, E. L. Cardarelli, N. A. Carman, B. Chide, J. Christian, B. C. Clark, E. Cloutis, A. Cousin, O. Forni, T. S. J. Gabriel, O. Gasnault, M. Golombek, F. Gómez, T. L. J. Henley, J. Huidobro, J. Johnson, M. W. M. Jones, T. V. Kizovski, A. Knight, J. A. Lasue, S. Le Mouélic, J. M. Madariaga, J. Maki, L. Mandon, **G. M. Martínez**, J. Martínez-Frías, T. McConnochie, P-Y. Meslin, M-P. Zorzano Mier, G. Paar, C. Royer, S. Siljeström, M. E.

Schmidt, S. Schröder, M. A. Sephton, R. Sullivan, N. Turenne, A. Udry, S. VanBommel, A. Vaughan, R. C. Wiens, N. Williams, the SuperCam team and the Regolith working group, An Examination of Soil Crusts on the Floor of Jezero crater, Mars, *Journal of Geophysical Research: Planets* (accepted), 2023.

68. Polkko, J., M. Hieta, A.-M. Harri, L. Tamppari, **G. M. Martínez**, D. Viúdez-Moreiras, H. Savijärvi, P. Conrad, M.P. Zorzano Mier, M. De La Torre Juárez, R. Hueso, A. Munguira, J. Leino, F. Gómez, I. Jaakonaho,E. Fischer, M. Genzer, V. Apéstigue, I. Arruego, D. Banfield, A. Lepinette, M. Paton, J.A. Rodríguez-Manfredi, A. Sánchez Lavega, E. Sebastián, D. Toledo, A. Vicente-Retortillo, and MEDA team, Initial results of the relative humidity observations by MEDA instrument onboard the Mars 2020 Perseverance Rover, *Journal of Geophysical Research: Planets* (accepted), 2023.

67. **Martínez, G. M.**, E. Sebastián, A. Vicente-Retortillo, M. D. Smith, J. R. Johnson, E. Fischer, H. Savijärvi, D. Toledo, R. Hueso, L. Mora-Sotomayor, H. Gillespie, A. Munguira, A. Sánchez-Lavega, M. T. Lemmon, F. Gómez, J. Polkko, L. Mandon, V. Apéstigue, I. Arruego, M. Ramos, P. Conrad, C. E. Newman, M. de la Torre-Juárez, F. Jordan, L. K. Tamppari, T. H. McConnochie, A.-M. Harri, M. Genzer, M. Hieta, M.-P. Zorzano, M. Siegler, O. Prieto, A. Molina, and J. A. Rodríguez-Manfredi, Surface Energy Budget, Albedo and Thermal Inertia at Jezero Crater, Mars, as Observed from the Mars 2020 MEDA Instrument, *Journal of Geophysical Research: Planets* (accepted), 2023.

66. Hueso, R., C. E. Newman , T. del Río-Gaztelurrutia, A. Munguira, A. Sánchez-Lavega, D. Toledo, V. Apéstigue, I. Arruego, A. Vicente-Retortillo, **G. M. Martínez**, M. Lemmon, R. Lorenz, M. Richardson, D. Viúdez-Moreiras, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, L. K. Tamppari, N. Murdoch, S. Navarro-López, J. Gómez-Elvira, M. Baker, J. Pla-García, A. M. Harri, M. Hieta, M. Genzer, J. Polkko, I. Jaakonaho, T. Makinen, A. Stott, D. Mimoun, B. Chide, E. Sebastián, D. Banfield, and A. Lepinette-Malvite, Convective vortices and dust devils detected and characterized by Mars 2020, *Journal of Geophysical Research: Planets* (accepted), 2022.

65. Smith, M. D., **G. M. Martínez**, E. Sebastián, M. T. Lemmon, M. J. Wolff, V. Apéstigue, I. Arruego, D. Toledo-Carrasco, D. Viúdez-Moreiras, J. A. Rodríguez-Manfredi, and M. de la Torre Juárez, Diurnal and Seasonal Variations of Aerosol Optical Depth Observed by MEDA/TIRS at Jezero Crater, Mars, *Journal of Geophysical Research: Planets* (accepted), 2022.

64. Toledo, D., V. Apéstigue, I. Arruego, M. Lemmon, L. Gómez, A. de F. Montoro, R. Hueso, C. Newman, M. Smith, D. Viúdez-Moreiras, **G. M. Martínez**, R. Lorenz, A. Vicente-Retortillo, A. Sánchez-Lavega, M. de la Torre Juárez, J. A. Rodríguez-Manfredi, I. Carrasco, M. Yela, J. J. Jiménez, E. García-Menendez, S. Navarro, F. J. Gómez-Elvira, A.-M. Harri, J. Polkko, M. Hieta, M. Genzer, N. Murdoch, E. Sebastián, Dust devil frequency of occurrence and radiative effects at Jezero crater, Mars, as measured by MEDA Radiation and Dust Sensor (RDS), *Journal of Geophysical Research: Planets* (accepted), 2022.

63. Savijärvi, H. I., **G. M. Martínez**, and A.-M. Harri, Surface energy fluxes and temperatures at Jezero crater, Mars, *Journal of Geophysical Research: Planets* (accepted), 2022.

62. Sánchez-Lavega, A., T. del Rio-Gaztelurrutia, R. Hueso, M. de la Torre Juárez, **G. M. Martínez**, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, J. A. Rodríguez-Manfredi, M. T. Lemmon, J. Pla-García, D. Toledo, A. Vicente-Retortillo, D. Viúdez-Moreiras, A. Munguira, L. K. Tamppari, C. Newman, J. Gómez-Elvira, S. Guzewich, T. Bertrand, V. Apéstigue, I. Arruego, M. Wolff, D. Banfield, I. Jaakonaho, T. Mäkinen, Mars 2020

Perseverance rover studies of the Martian atmosphere over Jezero from pressure measurements, *Journal of Geophysical Research: Planets* (accepted), 2022.

61. Murdoch, N., A. E. Stott, M. Gillier, R. Hueso, M. Lemmon, **G. M. Martínez**, V. Apéstigue, D. Toledo, R. D. Lorenz, B. Chide, A. Munguira, A. Sánchez-Lavega, A. Vicente-Retortillo, C. E. Newman, S. Maurice, T. Bertrand, D. Banfield, S. Navarro, M. Marin, J. Torres, J. Gómez, J. A. Rodríguez Manfredi, M. de la Torre Juárez, R. C. Wiens and D. Mimoun, The Sound of a Martian Dust Devil, *Nature Communications* (accepted), 2022.

60. Battalio, M., **G. M. Martínez**, C. Newman, M. de la Torre-Juárez, A. Sánchez-Lavega, and D. Viúdez-Moreiras, Planetary Waves Traveling between Mars Science Laboratory and Mars 2020, *Geophysical Research Letters*, e2022GL100866, 2022.

59. Hieta, M., M. Genzer, J. Polkko, I. Jaakonaho, S. Tabandeh, A. Lorek, S. Garland, J. P. de Vera, E. Fischer, **G. M. Martínez**, A.-M. Harri, L. Tamppari, H. Haukkaa, M. Meskanena, M. de la Torre Juárez, J. A. Rodríguez Manfredi, MEDA HS: Relative humidity sensor for the Mars 2020 Perseverance rover, *Sensors*, 105590, 2022.

58. Chide, B., T. Bertrand, R. D. Lorenz, A. Munguira, R. Hueso, A. Sánchez-Lavega, **G. M. Martínez**, A. Spiga, X. Jacob, M. de la Torre Juárez, M. T. Lemmon, D. Banfield, C. E. Newman, N. Murdoch, A. Stott, D. Viúdez-Moreiras, J. Pla-García, C. Larmat, N. L. Lanza, J. A. Rodríguez-Manfredi, R. C. Wiens, Acoustics reveals short-term air temperature fluctuations near Mars' surface, *Geophysical Research Letters*, e2022GL100333, 2022.

57. Rodríguez-Manfredi, J. A., M. de la Torre Juárez, A. Sánchez-Lavega, R. Hueso, **G. M. Martínez**, M. T. Lemmon, C. E. Newman, A. Munguira, ..., and the MEDA team, The rich meteorology of Jezero crater over the first 250 sols of Perseverance on Mars, *Nature Geoscience* (accepted), 2022.

56. Lemmon, M. T., M. D. Smith, D. Viúdez-Moreiras, M. de la Torre-Juárez, A. Vicente- Retortillo, A. Munguira, A. Sánchez-Lavega, R. Hueso, **G. M. Martínez**, B. Chide, R. Sullivan, D. Toledo, L. Tamppari, T. Bertrand, J.F. Bell, C. Newman, M. Baker, D. Banfield, J.A. Rodríguez-Manfredi, J.N. Maki, V. Apéstigue, Dust, Sand, and Winds within an Active Martian Storm in Jezero Crater, *Geophysical Research Letters*, *49*(17), e2022GL100126, 2022.

55. Apéstigue, V., A. Gonzalo, J. J. Jiménez, J. Boland, M. Lemmon, J. R. de Mingo, E. García, J. Rivas, J.Azcue, L. Bastide, N. Andrés, J. Martínez-Oter, M. González-Guerrero, A. Martin-Ortega, D. Toledo, F. Serrano, R. López-Heredero, I. Carrasco, Á. Carretero, M. Ángeles-Alcacera, D. R. MacDonald, L. B. Moore, J. A. Fernández-Viguri, M. Yela, M. Álvarez, P. Manzano, J. A. Martín, J. C. del Hoyo, M. Reina, R. Urqui, J. A. Rodríguez-Manfredi, L. Gómez-Martin, E. Cordoba, C. Hernandez, R. Leiter, A. Thompson, S. Madsen , M. D. Smith, D. Viúdez, A. Saiz-Lopez, **G. M. Martínez**, A. Sánchez-Lavega, M. de la Torre, F. J. Gómez-Elvira and I. Arruego, Radiation and Dust Sensor for Mars Environmental Dynamic Analyzer onboard M2020 rover, *Sensors* 22.8:2907, 2022.

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Interviewed by Hispanic TV channels (***Univisión Chicago, Telemundo 51 Miami, Telemundo 31 Orlando, 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 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

Motivational talk on the exploration of the Universe given to the *Capuchinos* Primary School, Murcia, Spain, 2020

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

Talentos-Altas Capacidades Intelectuales Región de Murcia, Murcia, Spain. Invited talk on NASA's missions to Mars given to an association of high-IQ students in primary and high schools, 2019

Pasadena Public Library, Pasadena, TX. Invited talk on Space Exploration to celebrate the Hispanic Heritage Month, 2019

English-Spanish translator for "Planetary News", a news service for the planetary community provided by the Lunar and Planetary Institute, 2019-present
Primary School "Nuestra Señora de Atocha", Murcia, Spain. Invited talk on the Exploration of Mars, 2016

Science & Skeptics Association, Ann Arbor, MI. Invited talk on Space Exploration, 2013-2014

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