

# CAUÊ S. BORLINA

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EDUCATION	<b>Massachusetts Institute of Technology (MIT)</b> , Cambridge, Massachusetts, USA Ph.D., Planetary Science, 2022 <b>University of Michigan</b> , Ann Arbor, Michigan, USA B.S.E. Honors, including <i>summa cum laude</i> , Aerospace Engineering, 2016 Minor, Physics, 2016	
EMPLOYMENT	<b>Starting Fall 2024, Assistant Professor</b> Department of Earth, Atmospheric, and Planetary Sciences, Purdue University <b>2022-present, Blaustein Postdoctoral Fellow</b> Department of Earth and Planetary Sciences, Johns Hopkins University <b>2016-2022, Graduate Student Researcher</b> Department of Earth, Atmospheric and Planetary Sciences, MIT <b>2015, Planetary Chemistry and Astrobiology Intern</b> Planetary Science, NASA Jet Propulsion Laboratory <b>2014, Undergraduate Research Fellow</b> Division of Geological and Planetary Sciences, California Institute of Technology <b>2013-2016, Assistant in Research</b> Department of Climate and Space Sciences and Engineering, University of Michigan	
TEACHING	<b>2020, Teaching Assistant</b> <i>12.002 Introduction to Geophysics and Planetary Science</i> Department of Earth, Atmospheric and Planetary Sciences, MIT <b>2020, Teaching Assistant</b> <i>12.400 Our Space Odyssey: An Introduction to the Origins of the Solar System</i> Department of Earth, Atmospheric and Planetary Sciences, MIT <b>2016, Undergraduate Instructional Aide</b> <i>AE 423 Computational Methods for Aerospace Engineering</i> Department of Aerospace Engineering, University of Michigan	
MISSION INVOLVEMENT	<b>2022-present</b> , Proposal Involvement on NASA Io Volcano Observer Mission <b>2013-2016</b> , Scientific Collaborator for the NASA Mars Science Laboratory	

HONORS AND  
AWARDS

- 2023**, Honorable Mention, 2021/2022 Ninninger Meteorite Award
- 2023**, The Ohio State University Provost Scholar Assistant Professorship (declined)
- 2021**, Blaustein Postdoctoral Fellowship, Johns Hopkins University
- 2021**, NSF Earth Sciences Postdoctoral Fellowship (declined)
- 2019**, School of Science Quality of Life Grant (*\$500 for MIT EAPS staff/student lecture series*), MIT
- 2018**, Shrock Fellowship, MIT
- 2017**, Mars Science Laboratory Extended Mission-1 Science and Operations Team, NASA Group Achievement Award
- 2017**, Grayce B. Kerr Fellowship, MIT
- 2016**, Presidential Graduate Fellowship Award, MIT
- 2016**, Distinguished Leadership Award, University of Michigan
- 2015**, Mars Science Laboratory Prime Mission Science and Operations Team, NASA Group Achievement Award
- 2012-2016**, Dean's List, University of Michigan (*Fall 2012, Winter 2013, Fall 2013, Winter 2014, Fall 2014, Winter 2015, Fall 2015, Winter 2016*)
- 2012-2016**, University Honors, University of Michigan (*Fall 2012, Winter 2013, Fall 2013, Winter 2014, Fall 2014, Winter 2015, Fall 2015, Winter 2016*)
- 2014**, Summer Undergraduate Research Fellowship, California Institute of Technology
- 2014**, James B. Angell Scholar, University of Michigan
- 2013**, Aviation Week Twenty20s, Raytheon/Aviation Week
- 2013**, Engineering Leadership Recognition, Student Space Systems Fabrication Laboratory

SERVICE AND  
OUTREACH

- 2023-present**, Review Editor for Geomagnetism and Paleomagnetism, *Frontiers in Earth Science*
- 2022-present**, Chair, Land Acknowledgement Working Group, Department of Earth and Planetary Sciences, Johns Hopkins University
- 2022-present**, Convener, *Planetary Magnetism and Protoplanetary Disk Magnetism* Session, AGU Fall Meeting
- 2022-2023**, Member, Organizational Team for the Space Telescope Science Institute Spring Symposium 2023
- 2023**, Panelist, NASA Review Panel (FINESST)

**2022**, Executive Secretary, NASA Review Panel (HGIO)

**2022**, Convener, *Chondritic Components: CAIs and Chondrules* Session, Lunar and Planetary Science Conference

**2021**, Convener, *Geomagnetic Changes at the Human Timescale* Session, AGU Fall Meeting

**2019-2022**, Committee Member, Planetary Lunch Series, MIT

**2019-2021**, Committee Member, Department of Earth, Atmospheric and Planetary Sciences Faculty Search, MIT

**2019-2020**, Co-founder, Minds Across Generations

**2019-2020**, Committee Chair, EAPS Active Talks Series, MIT

**2019-2020**, Committee Member, Department of Earth, Atmospheric and Planetary Sciences Taskforce 2023, MIT

**2016**, Board Member, School of Engineering Honors Program Student Advisory Board, University of Michigan

**2015-2016**, President, Students for Exploration and Development of Space, University of Michigan

**2014-2016**, Outreach Committee Chair, American Institute of Aeronautics and Astronautics, University of Michigan

**2013-2016**, Internal Vice President, Sigma Gamma Tau (National Honor Society for Aerospace Engineering), University of Michigan

PEER  
REVIEWER

*Geochemistry, Geophysics, Geosystems*  
*Geophysical Research Letters*  
*Geology*  
*Journal of Geophysical Research: Planets*  
*Meteoritics & Planetary Science*  
*Nature Communications*  
*Science*  
*Scientific Reports*

STUDENTS  
SUPERVISED IN  
RESEARCH

**2023-present**, Thomas Huelskamp (undergraduate at Johns Hopkins University)

**2021-present**, Zifan Lin (Ph.D. student at MIT)

**2021-2022**, Valeria Gutierrez (undergraduate at MIT, *2022 Latinx Students in Technology Scholarship Recipient*)

**2019-2022**, Elias Mansbach (Ph.D. student at MIT)

**2019-2020**, Hannah Ledford (undergraduate at MIT)

2018, Fuming Chang (undergraduate at University of Science and Technology of China, now Ph.D. student at University of Michigan)

FIELDWORK

2023, Minas Gerais Peruaçu Cave System and Mato Grosso Cave System, Brazil  
2017, Southern Cross Domain, Australia

GRANTS  
RECEIVED

2021, **The Role of Magnetic Fields in Regulating Planetary Atmospheres**  
*XSEDE Supercomputer Startup Allocation*

JOURNAL  
ARTICLES

**In Preparation** \_\_\_\_\_

- [22] **Borlina, C. S.**, Stanley, S., Hofstadter, M. The role of magnetic fields in the formation of giant planets.
- [21] **Borlina, C. S.**, Weiss, B. P., Bai, X.-N., Mansbach, E. N., Lima, E. A., Chatterjee, N., Tissot, F. L. H., McKeegan, K. D. Paleomagnetism of calcium-aluminum-rich inclusions of CO chondrites.
- [20] **Borlina, C. S.**, . . . Fold Tests from the Southern Cross, Western Australia.

**Submitted** \_\_\_\_\_

- [19] **Borlina, C. S.**, Lima, E. A., Feinberg, J. M., Jaqueto, P., Lascu, I., Trindade, R. I. F., Font, E., Sánchez-Moreno, E. M., Dimuccio, L., Yokoyama, Y., Parés, J. M., Weiss, B. P., Dorale, J. A. Obtaining High-resolution Magnetic Records from Speleothems Using Magnetic Microscopy.

**Published** \_\_\_\_\_

- [18] Fu, R. R., Drabon, N., Weiss, B. P., **Borlina, C. S.**, Kirkpatrick, H. Statistical reanalysis of Archean zircon paleointensities: No evidence for stagnant-lid tectonics. *Earth and Planetary Science Letters*, 2024.
- [17] Mansbach, E. N., Weiss, B. P., Schnepf N. R., Lima E. P., **Borlina, C. S.**, Chatterjee N., Gattacceca, J., Uehara M., Wang H. Magnetism of the Acapulco primitive achondrite and implications for the evolution of partially differentiated bodies. *Journal of Geophysical Research: Planets*, 2023.
- [16] Lima, E. A., Weiss, B. P., **Borlina, C. S.**, Baratchart, L., Hardin, D. Estimating the net magnetic moment of geological samples from planar field maps using multipoles. *G-cubed*, 2023.
- [15] Taylor, R., Reddy, S., Saxey, D., Rickard, W., Tang, F., **Borlina, C. S.**, Fu, R. R., Weiss, B. P., Bagot, P., Williams, H. M., Harrison, R. J. Direct age constraints on the magnetism of Jack Hills zircon. *Science Advances*, 2023.

- [14] **Borlina, C. S.**, Weiss, B. P., Bryson, J. F. J., Armitage, P. J. Lifetime of the outer solar system nebula from carbonaceous chondrites. *Journal of Geophysical Research: Planets*, 2022.
- [13] **Borlina, C. S.**, Weiss, B. P., Bryson, J. F. J., Bai, X.-N., Lima, E. A., Chatterjee, N., Mansbach, E. N. Paleomagnetic evidence for a disk substructure in the early solar system. *Science Advances*, 2021.
- [12] Fu, R. R., Drabon, N., Wiedenbeck, M., Brenner, A. R., Lowe D. R., **Borlina, C. S.** Paleomagnetism of 3.5-4.0 Ga zircons from the Barberton Greenstone Belt, South Africa. *Earth and Planetary Science Letters*, 2020.
- [11] Shang, H., Daye, M., Sivan, O., **Borlina, C. S.**, Tamura, N., Weiss, B. P., Bosak, T. Formation of zero-valent iron in iron-reducing cultures of *Methanosarcina barkeri*. *Environmental Science and Technology*, 2020.
- [10] **Borlina, C. S.**, Weiss, B. P., Lima, E. A., Tang, F., Taylor, R. J., Einsle, J. F., Harrison, R. J., Fu, R. R., Bell, E. A., Alexander, E. W., Kirkpatrick, H., Wielicki, M. M., Harrison, T. M., Ramezani J., Maloof, A. C. Re-evaluating the evidence for a Hadean-Eoarchean dynamo. *Science Advances*, 2020.
- [9] Mighani, S., Wang, H., Shuster, D. L., **Borlina, C. S.**, Nichols, C. I., Weiss, B. P. The end of the lunar dynamo. *Science Advances*, 2020.
- [8] Tang, F., Taylor, R. J. M., Einsle, J. F., **Borlina, C. S.**, Fu, R. R., Weiss, B. P., Williams, H. M., Williams, W., Nagy L., Midgley, P. A., Lima, E. A., Bell, E. A., Harrison, T. M., Alexander, E. W., Harrison, R. J. Secondary magnetite in ancient zircon precludes analysis of a Hadean geodynamo. *Proceedings of the National Academy of Sciences of the United States of America*, 2019.
- [7] Pajusalu M., **Borlina, C. S.**, Seager S., Ono S., Bosak T. Open-source sensor for measuring oxygen partial pressures below 100 microbars. *PLOS ONE*, 2018.
- [6] Weiss, B. P., Fu, R. R., Einsle, J. F., Glenn, D. R., Kehayias, P., Bell, E. A., Gelb, J., Araujo, J. F., Lima, E. A., **Borlina, C. S.**, Boehnke P., Johnstone D. N., Harrison T. M., Harrison R. J., Walsworth R. L. Secondary magnetic inclusions in detrital zircons from the Jack Hills, Western Australia and implications for the origin of the geodynamo. *Geology*, 2018.
- [5] **Borlina, C. S.**, Renno, N. O. The impact of a severe drought on dust lifting in California’s Owens Lake area. *Nature Scientific Reports*, 2017.
- [4] Harrison, R. G., Barth, E., Esposito, F., Merrison, J., Montmessin, F., Aplin, K. L., **Borlina, C. S.**, Berthelier, J. J., Déprez, G., Farrell, W., Houghton, I. M. P., Renno, N. O., Nicoll, K. A., Tripathi, S. N., Zimmerman, M. Applications of electrified dust and dust devil electrodynamics to Martian atmospheric electricity. *Space Science Reviews*, 2016.
- [3] Martínez, G. M., Fischer, E., Rennó, N. O., Sebastián, E., Kemppinen, O., Bridges, N., **Borlina, C. S.**, Meslin, P.-Y., Genzer, M., Harri, A.-H., Vicente-

Retortillo, A., Ramos, M., de la Torre Juárez, M., Gómez, F., Gomez-Elvira, J., and the REMS team. Likely frost events at Gale Crater: analysis from MSL/REMS measurements. *Icarus*, 2016.

- [2] **Borlina, C. S.**, Ehlmann, B. L., Kite, E. S. Modeling the thermal and physical evolution of Mount Sharp’s sedimentary rocks, Gale Crater, Mars: implications for diagenetic minerals on the MSL Curiosity rover traverse. *Journal of Geophysical Research: Planets*, 2015.
- [1] Martínez, G. M., Renno, N. O., Fischer, E., **Borlina, C. S.**, Hallet, B., de la Torre Juárez, M., Vasavada, A. R., Ramos, M., Hamilton, V., Gomez-Elvira, J., Haberle, R. M. Surface energy budget and thermal inertia at Gale Crater: calculations from ground-based measurements. *Journal of Geophysical Research: Planets*, 2014.

INVITED TALKS

- [24] **University of Michigan, Star and Planet Formation Discussion Group, Department of Astronomy.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2024.
- [23] **University of Massachusetts Lowell, Lowell Center for Space Science & Technology Seminar.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2024.
- [22] **University of Maryland, Planetary and Exoplanetary Astronomy Lunch Seminar.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [21] **Smithsonian Institution.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [20] **The Ohio State University, School of Earth Sciences.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [19] **Purdue University, Department of Earth, Atmospheric, and Planetary Sciences.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [18] **Magnetics Information Consortium Workshop.** *Obtaining High-resolution Paleomagnetic Records from Speleothems using SQUID Microscopy.* 2023.
- [17] **Cornell University, Department of Astronomy.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [16] **Rice University, Department of Earth, Environmental and Planetary Sciences.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites.* 2023.
- [15] **Georgia Institute of Technology, School of Earth & Atmospheric Sciences.** *Understanding the Evolution of the Early Solar System Through Paleo-*

*magnetism of Meteorites*. 2023.

- [14] **Lehigh University, Department of Earth and Environmental Sciences.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2023.
- [13] **Space Telescope Science Institute, Exoplanets/Star & Planet Formation Seminar.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2022.
- [12] **Johns Hopkins University Applied Physics Laboratory, Brownbag Series.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2022.
- [11] **International Space Science Institute, *How Heavy Elements Escape the Earth: Past, Present, and Implications to Habitability* Team Meeting.** *Determining Earth's Magnetic Field Records Using Micro-paleomagnetism*. 2022.
- [10] **Lunar and Planetary Institute Seminar Series.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2022.
- [9] **Carnegie Earth and Planets Laboratory, Astronomy Seminar Series.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2022.
- [8] **Brown University, Department of Earth, Environmental and Planetary Sciences.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2022.
- [7] **University of California, Santa Cruz, Institute of Geophysics and Planetary Physics Seminar Series.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2021.
- [6] **University of California, Santa Cruz, Planetary Lunch Seminar.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2021.
- [5] **Johns Hopkins University, Department of Earth and Planetary Sciences.** *What Magnetic Fields Tell Us About the Early Solar System*. 2021.
- [4] **NASA Jet Propulsion Laboratory, Planetary Science Seminar Series.** *Understanding the Evolution of the Early Solar System Through Paleomagnetism of Meteorites*. 2021.
- [3] **University of Hawaii, Manoa, Institute of Geophysics and Planetology.** *Constraining the Evolution of Magnetic Fields in the Solar System*. 2020.
- [2] **Smithsonian Institution, Department of Mineral Sciences.** *Constraining the Evolution of Magnetic Fields in the Solar System*. 2020.

- [1] **University of São Paulo, Department of Geophysics.** *Discussing the Evidence of a Dynamo Between the Hadean and the Eoarchean.* 2018.

CONFERENCE  
PRESENTATIONS  
AND  
PROCEEDINGS

Talks\*, Invited Talks\*\*

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- [41] **Borlina, C. S.**, Stanley, S., Hofstadter, M. How Planetary Magnetic Fields Influence the Formation of Giant Planets. *AGU Fall Meeting*, 2023.
- [40] **Borlina, C. S.**, Stanley, S., Hofstadter, M. The Role of Planetary Magnetic Fields During the Formation of Ice Giants. *GRC: Origins of the Solar System*, 2023.
- [39] **Borlina, C. S.**, Stanley, S., Hofstadter, M. The Role of Planetary Magnetic Fields During the Formation of Ice Giants. *Lunar and Planetary Science Conference*, 2023.
- [38] **Borlina\***, **C. S.**, Lima, E. A., Feinberg, J. M., Lascu, I., Jaqueto, P., Trindade, R. I. F., Weiss, B. P. Obtaining High-resolution Holocene Paleomagnetic Records from Speleothems Using Superconducting Quantum Interference Device (SQUID) Microscopy. *AGU Fall Meeting*, 2022.
- [37] **Borlina, C. S.**, Stanley, S., Hofstadter, M. The Role of Planetary Magnetic Fields During the Formation of Ice-giants. *AGU Fall Meeting*, 2022.
- [36] Lima, E. A., Font, E., **Borlina, C. S.**, Moreno, E. M. S., Feinberg, J. M., Trindade, R. I. F., Edwards, R. L., Dimuccio, L. A., Weiss, B. P. High-resolution Paleomagnetic Analysis of a Detrital-rich Portuguese Speleothem Using Magnetic Microscopy. *AGU Fall Meeting*, 2022.
- [35] Jaqueto, P., Feinberg, J. M., Doctor, R., Cruz-Reyes, M., Penn, L., Lascu, I., **Borlina, C. S.**, Lima, E. A., Strikis, N., Novello, V. F., Trindade, R. I. F., Cruz, F. W. Aragonitic Stalagmites Record of the Geomagnetic Field: Paleomagnetic Promise and Limitations. *AGU Fall Meeting*, 2022.
- [34] **Borlina\*\***, **C. S.**, Weiss, B. P., Bai, X.-N., Mansbach, E. N., Lima, E. A., Chatterjee, N., Tissot, F. L. H., McKeegan, K. D. Paleomagnetism of Calcium-aluminum-rich Inclusions. *The Geological Society of American: Rendezvous at the Geologic Crossroads*, 2022.
- [33] **Borlina\***, **C. S.**, Weiss, B. P., Bai, X.-N., Mansbach, E. N., Chatterjee, N., Tung, P., Harrison, R., Lima, E. A., Tissot, F. L. H., McKeegan, K. D. Paleomagnetism of Calcium-aluminum-rich Inclusions. *Lunar and Planetary Science Conference*, 2022.
- [32] Bai, X.-N., **Borlina, C. S.**, Weiss, B. P., Mansbach, E. N., Chatterjee, N., Tung, P., Harrison, R., Lima, E. A., Tissot, F. L. H., McKeegan, K. D. Calcium-aluminum-rich Inclusion Paleomagnetism: A Theoretical Perspective. *Lunar and Planetary Science Conference*, 2022.



- [31] Mansbach, E. N., Weiss, B. P., **Borlina, C. S.**, Lima, E. A. Paleomagnetism of the Acapulco Primitive Achondrite. *Lunar and Planetary Science Conference*, 2022.
- [30] **Borlina, C. S.**, Weiss, B. P., Bai, X.-N., Lima, E. A., Chatterjee, N., Tissot, F. L. H. Paleomagnetism of Calcium-aluminum-rich Inclusions from CO chondrites. *AGU Fall Meeting*, 2021.
- [29] **Borlina\*\***, **C. S.**, Lima, E. A., Feinberg, J. M., Lascu, I., Trindade, R. I. F., Weiss, B. P. Using SQUID Microscopy to Obtain High Resolution Paleomagnetic Records from Speleothems. *AGU Fall Meeting*, 2021.
- [28] Lima, E. A., Weiss, B. P. , **Borlina C. S.**, Baratchart, L., Hardin, D. P. Paleomagnetic Analysis of Geological Samples with Complex Magnetization Using Multipole Fitting. *AGU Fall Meeting*, 2021.
- [27] Mansbach, E. N., Weiss, B. P., **Borlina, C. S.**, Lima, E. A. A Paleomagnetic Investigation of the Acapulcoite-Lodranite Parent Body to Understand Core Formation and Differentiation on Small Bodies. *AGU Fall Meeting*, 2021.
- [26] **Borlina\***, **C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A., Bai, X.-N. Evidence for Non-Steady Accretion in the Solar Nebula Inferred from Paleomagnetism of CO Chondrules. *Lunar and Planetary Science Conference*, 2021.
- [25] **Borlina\***, **C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A., Bai, X.-N.. Evidence for Solar Nebula Magnetic Fields from CO Chondrites. *AGU Fall Meeting*, 2020.
- [24] Illie, R., Lin, M., **Borlina, C. S.**, Oran, R., Nichols, C. I. O., Glocer, A., Weiss, B. P. What Makes the Earth Lose Weight? *AGU Fall Meeting*, 2020.
- [23] Fu, R. R., Drabon, N., Wiendenbeck, M., Brenner, A. R., Lowe, D. R., **Borlina, C. S.** Paleomagnetism of 3.5-4.0 Ga Zircons from the Barberton Greenstone Belt, South Africa. *AGU Fall Meeting*, 2020.
- [22] **Borlina\***, **C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A. Measurements of Solar Nebula Magnetic Fields from CO Chondrites. *Lunar and Planetary Science Conference*, 2020 .
- [21] **Borlina\***, **C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A. Measurements of Early Magnetic Fields in the Innermost and Outer Solar System from CO Chondrites. *AGU Fall Meeting*, 2019.
- [20] **Borlina\*\***, **C. S.**, Weiss, B. P., Lima, E. A., Tang, F., Taylor, R. J., Einsle, J. F., Harrison, R. J., Fu, R. R., Bell, E. A., Alexander, E. W., Kirkpatrick, H., Wielicki, M. M., Harrison., T. M., Ramezani J., Maloof, A. C. Determining How Magnetic Fields Evolve Through Time in the Solar System. *Dating in Deep Time Workshop*, 2019.
- [19] **Borlina, C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A. Constraining Nebular Magnetic Fields in the Outer Solar System from CO Chondrites. *Santa*

*Fe Conference on Rock Magnetism*, 2019.

- [18] **Borlina, C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A. Constraining Nebular Magnetic Fields in the Outer Solar System from CO Chondrites. *GRS: Origins of the Solar System*, 2019.
- [17] **Borlina, C. S.**, Weiss, B. P., Bryson, J. F. J., Lima, E. A. Constraining Nebular Magnetic Fields in the Outer Solar System from CO Chondrites. *Lunar and Planetary Science Conference*, 2019.
- [16] **Borlina\***, C. S., Weiss, B. P., Lima, E. A., Tang, F., Taylor, R. J., Einsle, J. F., Harrison, R. J., Fu, R. R., Bell, E. A., Alexander, E. W., Kirkpatrick, H., Wielicki, M. M., Harrison., T. M., Ramezani J., Maloof, A. C. Revisiting the Evidence for the Hadean Dynamo. *AGU Fall Meeting*, 2018.
- [15] Taylor, R., Harrison, R. J., Tang, F., **Borlina, C. S.**, Weiss, B. P., Fu, R. R. First Images Of Magnetite In Jack Hills Zircon-Are They Primary Inclusions? *AGU Fall Meeting*, 2018.
- [14] Harrison R. J., Kuppili, C., Einsle, J. F., Muraszko, J. R., Ball, M. R., Collins, S. M., Chang, L., **Borlina, C. S.**, Weiss, B. P., Fu, R. R. The True Nature of Remanence Carriers Revealed: High-resolution Tomography for Single-Crystal Rock Magnetic Applications. *AGU Fall Meeting*, 2018.
- [13] **Borlina\***, C. S., Weiss, B. P., Lima, E. A., Tang, F., Taylor, R. J., Einsle, J. F., Harrison, R. J., Fu, R. R., Bell, E. A., Alexander, E. W., Kirkpatrick, H., Wielicki, M. M., Harrison., T. M., Ramezani J., Maloof, A. C. Questioning the Evidence for the Hadean Dynamo. *Goldschmidt*, 2018.
- [12] **Borlina\***, C. S., Weiss, B. P., Lima, E. A., Tang, F., Taylor, R. J., Einsle, J. F., Harrison, R. J., Fu, R. R., Bell, E. A., Alexander, E. W., Kirkpatrick, H., Wielicki, M. M., Harrison., T. M., Ramezani J., Maloof, A. C. Paleomagnetism of Hadean to Neoproterozoic Detrital Zircons from the Jack Hills, Western Australia. *AGU Fall Meeting*, 2017.
- [11] **Borlina, C. S.**, Pajusalu, M., Bosak, T. Assessing Activity of Facultative Anaerobes at Nanomolar Oxygen Concentration Environments. *Geobiology Society Conference*, 2017.
- [10] Martinez, G., McConnochie, T., Renno, N., Meslin, P.Y., Fischer, E., Vicente-Retortillo, A., **Borlina, C. S.**, Kempainen, O., Genzer, M., Harri, A.M. and de la Torre-Juárez, M. Diurnal Variation of Atmospheric Water Vapor at Gale crater: Analysis from Ground-based Measurements. *EGU General Assembly Conference*, 2016.
- [9] Martinez, G. M., McConnochie, T., Renno, N. O., Meslin, P. Y., Fischer, E., Vicente-Retortillo, A., **Borlina, C. S.**, Kempainen, O., Genzer, M., Harri, A.M. and de la Torre-Juarez, M. Diurnal Variation of Near-Surface Atmospheric Water Vapor at Gale: Analysis from REMS and ChemCam Measurements. *Lunar and Planetary Science Conference*, 2016.

- [8] Martínez, G. M., Fischer, E., Renno, N. O., Sebastián, E., Kemppinen, O., Bridges, N., **Borlina, C. S.**, Meslin, P.-Y., Genzer, M., Harri, A.-M., Vicente-Retortillo, A., Ramos, M., de la Torre Juárez, M., Gómez, F., Gómez-Elvira, J., and the REMS Team. Analysis of Likely Frost Events and Day-to-Night Variability in Near-Surface Water Vapor at Gale. *AGU Fall Meeting*, 2015.
- [7] **Borlina\***, C. S., Ehlmann, B. L. Modelling Diagenesis of Gale Crater Sedimentary Rocks: Scenarios Testable by the Curiosity Rover. *Lunar and Planetary Science Conference*, 2015.
- [6] Martínez, G. M., Fischer, E., Rennó, N. O., Sebastián, E., Kemppinen, O., Bridges, N., **Borlina, C. S.**, Meslin, P.-Y., Genzer, M., Harri, A.-H., Vicente-Retortillo, A., Ramos, M., de la Torre Juárez, M., Gómez, F., Gomez-Elvira, J., and the REMS team. Potential Sub-Micrometer-Thick Frost Events and Soil Water Content at Gale Crater: Calculations from MSL/REMS Measurements. *Lunar and Planetary Science Conference*, 2015.
- [5] Martínez, G. M., Fischer, E., Rennó, N. O., Sebastián, E., Kemppinen, O., Bridges, N., **Borlina, C. S.**, Meslin, P.-Y., Genzer, M., Harri, A.-H., Vicente-Retortillo, A., Ramos, M., de la Torre Juárez, M., Gómez, F., Gomez-Elvira, J., and the REMS team. Study of Potential Sub-Micrometer-Thick Frost Events and Soil Water Content at Gale Crater. *AGU Fall Meeting*, 2014.
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