

CAUÊ S. BORLINA

CONTACT INFORMATION	Hampton Hall, 3277D 550 Stadium Mall Drive Purdue University West Lafayette, IN 47907 USA	Phone: +1 (765) 494-7681 Website: caueborlina.com E-mail: cborlina@purdue.edu
EDUCATION	Massachusetts Institute of Technology (MIT) , Cambridge, Massachusetts, USA Ph.D., Planetary Science, 2022 University of Michigan , Ann Arbor, Michigan, USA B.S.E. Honors, including <i>summa cum laude</i> , Aerospace Engineering, 2016 Minor, Physics, 2016	
EMPLOYMENT	2025-present, Gerald H. & Sharon D. Krockover New Frontiers Assistant Professor Department of Earth, Atmospheric, and Planetary Sciences, Purdue University Department of Physics & Astronomy by Courtesy, Purdue University 2024-2025, Assistant Professor Department of Earth, Atmospheric, and Planetary Sciences, Purdue University 2022-2024, Blaustein Postdoctoral Fellow Department of Earth and Planetary Sciences, Johns Hopkins University 2016-2022, Graduate Student Researcher Department of Earth, Atmospheric and Planetary Sciences, MIT 2015, Planetary Chemistry and Astrobiology Intern Planetary Science, NASA Jet Propulsion Laboratory 2014, Undergraduate Research Fellow Division of Geological and Planetary Sciences, California Institute of Technology 2013-2016, Assistant in Research Department of Climate and Space Sciences and Engineering, University of Michigan	
TEACHING	Assistant Professor, Department of Earth, Atmospheric, and Planetary Sciences, Purdue University EAPS 400: Planetary Science Senior Capstone EAPS 391: Great Issues in Space Exploration EAPS 591: Magnetic Fields in Planetary Systems Teaching Assistant, Department of Earth, Atmospheric, and Planetary Sciences, MIT 12.002: Introduction to Geophysics and Planetary Science 12.400: Our Space Odyssey: An Introduction to the Origins of the Solar System	

**Undergraduate Instructional Aide, Department of Aerospace Engineering,
University of Michigan**

AE 423: Computational Methods for Aerospace Engineering

MISSION INVOLVEMENT	2022-present , Proposal Involvement on NASA Io Volcano Observer Mission
	2013-2016 , Scientific Collaborator for the NASA Mars Science Laboratory
HONORS AND AWARDS	2025 , Seed for Success Acorn Award, Purdue University
	2025 , Gerald H. & Sharon D. Krockover New Frontiers Assistant Professorship, Purdue University
	2024 , 2023 Outstanding Reviewer for Geochemistry, Geophysics, Geosystems
	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 (<i>\$500 for MIT EAPS staff/student lecture series</i>), 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 (<i>Fall 2012, Winter 2013, Fall 2013, Winter 2014, Fall 2014, Winter 2015, Fall 2015, Winter 2016</i>)
	2012-2016 , University Honors, University of Michigan (<i>Fall 2012, Winter 2013, Fall 2013, Winter 2014, Fall 2014, Winter 2015, Fall 2015, Winter 2016</i>)
	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 Lab-

oratory

SERVICE AND
OUTREACH

2025-present, Associate Editor, Geophysical Research Letters

2025-present, Member, EAPS Alumni Committee

2024-present, Member, EAPS Graduate Committee

2023-present, Community Reviewer for Geomagnetism and Paleomagnetism, Frontiers in Earth Science

2025, Session Chair, *Workshop on Bennu and Ryugu: Samples from the Early Solar System*, Lunar and Planetary Institute

2024-2025, Member, EAPS Community and Belonging Committee

2024, Organizer, Magnetism, Atmosphere and Life Conference

2022-2024, Convener, *Planetary Magnetism and Protoplanetary Disk Magnetism* Session, AGU Fall Meeting

2022-2024, Chair, Land Acknowledgement Working Group, Department of Earth and Planetary Sciences, Johns Hopkins University

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

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

FUNDING

2026-2029, NSF Structure and Physics of the Solid Earth, PI (\$66,218). Collaborative Research: Obtaining paleomagnetic time-series records from corals.

2025-2028, NASA Solar System Workings, PI (\$1,100,067). Determining the Influence of Impacts on the Lunar Magnetic History.

2025-2029, NASA Planetary Science Enabling Facilities, Co-I (\$245,787.21 to Co-I Borlina out of \$5,220,380). Purdue Resources Empowering Coordinated Investigations for Sample Exploration (PRECISE).

2025, Purdue Instructional Equipment Grant, PI (\$50,000). Mapping Magnetic Anomalies through Aeromagnetometry in Earth and Planetary Science Courses.

2025, Purdue Office of Engagement, Community Engagement, Research and Impact Grant, Co-PI (\$29,182). Co-Design of Natural Environment VR Experience in Partnership with the Indiana Department of Natural Resources.

2025, Purdue Experiential Education, PI (\$5,000). Enhancing Accessibility to Caves through Virtual Reality in Collaboration with the Classroom.

STUDENTS AND
POSTDOC
MENTORSHIP

Postdocs _____

2026-present, Regupathi Angappan

2025-2026, Katie Bristol (NSF Postdoctoral Fellow, now at the Institute for Rock Magnetism, University of Minnesota)

Ph.D. Students _____

2024-present, Sedinam Biassey-Bogart

2024-present, Melissa de Andrade Nunes (University of São Paulo, Brazil)

Master's Student _____

2025-present, Emma Kostecki

2025-present, Roshini Saravanan

Ph.D. Committee _____

2026-present, Deniz Kacan (Physics & Astronomy)

2025-present, Abigail Dunnigan

2025-present, Samuel Harris

2025-present, Jae St. Pierre

2024-present, Mariana Blanco-rojas

Undergraduate Students _____

2026-present, Gabriel Chambers

2026-present, Katrina Boland

2026-present, Elizabeth Gray

2025-present, Hiya Samanta

2024-present, Brianna Petrucci

2025-2026, Arin Bhav

2024-2025, Allison Loper

2025, Henry Lee

2025, Siya Jariwala

2023-2024, Thomas Huelskamp (Johns Hopkins University)

2021-2022, Valeria Gutierrez (MIT)

2019-2020, Hannah Ledford (MIT)

2018, Fuming Chang (MIT)

FIELDWORK

2023, Minas Gerais Peruaçu Cave System and Mato Grosso Cave System, Brazil

2017, Southern Cross Domain, Australia

**COMPUTER
ALLOCATIONS**

2025-present, Determining the Existence of Crustal Magnetism on Icy Moons
PI, ACCESS Discover Allocation

2024-present, Effect of Core-Mantle Boundary Heat Flux on the Geodynamo
Co-I, ACCESS Discover Allocation

In Preparation

- [24] **Borlina, C. S.**, Bristol, K. E., Doctor, R., Feinberg, J. M. Evidence of a Solar Nebula Magnetic Field in Samples Returned From Bennu.
- [23] Angappan, R., **Borlina, C. S.**, Stanley, S., Hofstadter, M. The Role of Magnetic Fields in the Formation of Giant Planets.

Published

- [22] **Borlina, C. S.**, Weiss, B. P., Bai, X. -N., Tung, P. Y., Harrison, R., Mansbach, E. N., Lima, E. A., Chatterjee, N., Tissot, F. L. H., McKeegan, K. D. Paleomagnetic Evidence for a Nebular Magnetic Field from Calcium-Aluminum-rich Inclusions. *PNAS*, 2026.
- [21] Alonso Tagle, M. L. , Maggiolo, R., Gunell, H., **Borlina, C. S.**, . . . , Van Doorselaere, T. Evolution of Atmospheric Oxygen Escape from Earth During the Last 2450 Myr. *Journal of Geophysical Research: Space Physics*, 2026.
- [20] Hamilton, C. W., McEwen, A. S., . . . , **Borlina, C. S.**, . . . , J. Spencer. Comparing NASA Discovery and New Frontiers Class Mission Concepts for the Io Volcano Observer (IVO). *The Planetary Science Journal*, 2025.
- [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. *Geochemistry, Geophysics, Geosystems*, 2024.
- [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. *Geochemistry, Geophysics, Geosystems*, 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 *Methanobacillus* *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. *PNAS*, 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

- [34] University of Arizona, Department of Geosciences, 2026.
- [33] Arizona State University, Buseck Center for Meteorite Studies, 2026
- [32] Indiana University, Department of Earth and Atmospheric Sciences, 2026.
- [31] University of Colorado Boulder, Department of Geological Sciences, 2025.
- [30] Indiana University, Indianapolis, Department of Earth and Environmental Sciences, 2025.
- [29] NASA Jet Propulsion Laboratory, Planetary Science Seminar Series, 2025.
- [28] California Institute of Technology, Petrology Reading Group, 2025.
- [27] University of Minnesota, Department of Earth & Environmental Sciences Seminar Series, 2025.
- [26] Arizona State University, Geophysics Seminar Series, 2024.
- [25] University of Maryland, Department of Astronomy, 2024.
- [24] University of Michigan, Star and Planet Formation Discussion Group, Department of Astronomy, 2024.
- [23] University of Massachusetts Lowell, Lowell Center for Space Science & Technology Seminar, 2024.
- [22] University of Maryland, Planetary and Exoplanetary Astronomy Lunch Seminar, 2023.
- [21] Smithsonian Institution, 2023.
- [20] The Ohio State University, School of Earth Sciences, 2023.
- [19] Purdue University, Department of Earth, Atmospheric, and Planetary Sciences, 2023.

- [18] Magnetism Information Consortium Workshop, 2023.
- [17] Cornell University, Department of Astronomy, 2023.
- [16] Rice University, Department of Earth, Environmental and Planetary Sciences, 2023.
- [15] Georgia Institute of Technology, School of Earth & Atmospheric Sciences, 2023.
- [14] Lehigh University, Department of Earth and Environmental Sciences, 2023.
- [13] Space Telescope Science Institute, Exoplanets/Star & Planet Formation Seminar, 2022.
- [12] Johns Hopkins University Applied Physics Laboratory, Brownbag Series, 2022.
- [11] International Space Science Institute, *How Heavy Elements Escape the Earth: Past, Present, and Implications to Habitability* Team Meeting, 2022.
- [10] Lunar and Planetary Institute Seminar Series, 2022.
- [9] Carnegie Earth and Planets Laboratory, Astronomy Seminar Series, 2022.
- [8] Brown University, Department of Earth, Environmental and Planetary Sciences, 2022.
- [7] University of California, Santa Cruz, Institute of Geophysics and Planetary Physics Seminar Series, 2021.
- [6] University of California, Santa Cruz, Planetary Lunch Seminar, 2021.
- [5] Johns Hopkins University, Department of Earth and Planetary Sciences, 2021.
- [4] NASA Jet Propulsion Laboratory, Planetary Science Seminar Series, 2021.
- [3] University of Hawaii, Manoa, Institute of Geophysics and Planetology, 2020.
- [2] Smithsonian Institution, Department of Mineral Sciences, 2020.
- [1] University of São Paulo, Department of Geophysics, 2018.

SELECTED
CONFERENCE
PRESENTATIONS
AND
PROCEEDINGS

Talks*, Invited Talks, Advised by Borlina[†]** _____

- [61] Biassey-Bogart*[†], S., **Borlina, C. S.**, Rudolph, M. L., Raymond, C. A.. Using Magnetic Signatures to Investigate the Internal Dynamics of Icy Moons. *Lunar and Planetary Science Conference*, 2026.
- [60] **Borlina***, **C. S.**, Bristol[†], K. E., Doctor, R., Feinberg, J. M. Evidence of a Solar Nebula Magnetic Field in Samples Returned from Bennu. *Lunar and Planetary Science Conference*, 2026.
- [59] **Borlina***, **C. S.**, Bristol[†], K. E., Doctor, R., Feinberg, J. M. Potential Evidence of a Solar Nebula Magnetic Field in Samples Returned From Bennu. *AGU Fall Meeting*, 2025.

- [58] Biassey-Bogart^{*†}, S., **Borlina, C. S.**, Rudolph, M. L. Using Magnetic Signatures to Investigate the Internal Dynamics of Icy Moons. *AGU Fall Meeting*, 2025.
- [57] Petrucci^{*†}, B., **Borlina, C. S.**, Nunes, M., Trindade, R. I. F. Investigating the Role of Lightning in Remanent Magnetization on the Surface of Mars. *AGU Fall Meeting*, 2025.
- [56] Bristol[†], K. E., **Borlina, C. S.**, Feinberg, J. M. From Bulk Rock Magnetism to Individual Inclusions: A Detailed Magnetic Characterization of Refractory Inclusions in Chondrites for Paleomagnetic Analysis. *AGU Fall Meeting*, 2025.
- [55] Kouvaras Ostrowski, A., **Borlina, C. S.**, Samanta, H., Jariwala, S., Lee, H., Bramson, A. M., Ilie, R. Developing and Co-Designing a Cave Virtual Reality Experience for Students in Geoscience Courses. *AGU Fall Meeting*, 2025.
- [54] Martin, C., Lavier, L., Taylor, F. W., **Borlina, C. S.** Obtaining Paleomagnetic Time-series Records From Corals. *AGU Fall Meeting*, 2025.
- [53] **Borlina*, C. S.**, Bristol[†], K. E., Doctor, R., Feinberg, J. M. Potential Evidence of a Solar Nebula Magnetic Field in Samples Returned From Bennu. *Workshop on Bennu and Ryugu: Samples from the Early Solar System*, 2025.
- [52] Bristol^{*†}, K. E., **Borlina, C. S.**, Feinberg, J. M. Magnetized in Brines: Evidence For Robust Magnetic Carriers From Bennu’s Returned Samples. *Workshop on Bennu and Ryugu: Samples from the Early Solar System*, 2025.
- [51] Thompson, M. S., Bedford, C. C., **Borlina, C. S.**, Bryant, R. N., Caffee, M. W., Eddy, M. P., Horgan, B. H. N., Ickert, R. B., Pearce, B. K. D., Prissel, K., Prissel, T. C., Tremblay, M. M., Wiens, R. C. Purdue Resources Empowering Coordinated Investigations for Sample Exploration (PRECISE): A New NASA Planetary Science Enabling Facility. 87th Annual Meeting of the Meteoritical Society, 2025.
- [50] Bristol[†], K. E., **Borlina, C. S.**, Feinberg, J. M. Magnetic Characterization of Chondrites and their Suitability for Paleomagnetic Analysis of Refractory Inclusions. *IRM Conference on Rock Magnetism*, 2025.
- [49] Biassey-Bogart[†], S., **Borlina, C. S.**, Rudolph, M. L. Using Magnetic Signatures to Investigate the Internal Dynamics of Icy Moons. *IRM Conference on Rock Magnetism*, 2025.
- [48] **Borlina*, C. S.**, Tikoo, S. M., Crow, C. A., Mansbach, E. N., Fu, R. R. Using Lunar Zircon Grains to Elucidate the Early Lunar Dynamo. *Lunar and Planetary Science Conference*, 2025.
- [47] Brain, D., Berta-Thompson, Z., Chaffin, M., . . . , **Borlina, C. S.**, Frelikh, R., Notsu, Y., Thomas, T. Atmospheric loss from Venus-like planets orbiting G stars. *American Astronomical Society Meeting*, 2025.

- [46] **Borlina, C. S.**, Tikoo, S. M., Crow, C. A., Mansbach, E. N. Determining the Potential of Lunar Zircons as Paleomagnetic Targets. *AGU Fall Meeting*, 2024.
- [45] Lascu, I., Jaqueto, P., Livi, K., Feinberg, J. M., **Borlina, C. S.**, Lima, E. A. Towards a Clearer Picture of Speleothem Magnetism Carriers: In Situ Imaging of Magnetic Particles from Calcite and Aragonite Stalagmites. *AGU Fall Meeting*, 2024.
- [44] Tagle, M. L. A., Maggiolo, R., Gunell, H., Cessateur G., Keyser, J., Dandouras, I., Vidotto, A., **Borlina, C. S.**, Nichols, C., Lapenta, G., Pierrard, V., Vandaele, A. C. Evolution of Atmospheric Oxygen Escape on Earth since the Paleoproterozoic Era. *EGU General Assembly Conference*, 2024.
- [43] **Borlina****, **C. S.**, Weiss, B. P., Bai, X.-N., Mansbach, E. N., Lima, E. A., Chatterjee, N., Tissot, F. L. H., McKeegan, K. D. Paleomagnetic Evidence for a Nebular Magnetic Field at the Beginning of the Solar System. *Goldschmidt Conference*, 2024.
- [42] **Borlina, C. S.**, Stanley, S., Hofstadter, M. How Planetary Magnetic Fields Influence the Formation of Giant Planets. *AGU Fall Meeting*, 2023.
- [41] Tung, P., Harrison, R. J., **Borlina, C. S.**, Weiss, B. P. SIGMA: A Machine Learning Tool for Identifying and Unmixing Mineral Phases from Energy Dispersive X-ray Spectroscopy (EDS) Data. *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.
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