

ALEX J. EVANS, PHD

Curriculum Vitae

Department of Earth, Environmental and Planetary Sciences
Brown University
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RESEARCH INTERESTS

Statistical, predictive, and analytical modeling of global-scale tectonic, geodynamic, and geophysical processes; analyses of altimetry, gravity, geomorphology, and tectonics to determine the structure, atmospheric, and internal evolution of solid planets; geobiology and microbiology work focused on understanding the emergence and persistence of early life on Earth and other worlds.

EMPLOYMENT

Brown University – Dept. of Earth, Env. and Planetary Sci. (Providence, RI) July 2018 – Present
Assistant Professor of Earth, Environmental and Planetary Sciences

University of Arizona – Lunar and Planetary Lab. (Tucson, AZ) January 2017 – August 2018
Postdoctoral Research Associate; Advisor: Prof. Jeffrey C. Andrews-Hanna

Southwest Research Institute – Planetary Sci. Dir. (Boulder, CO) January 2016 – January 2017
Postdoctoral Researcher; Advisor: Jeffrey C. Andrews-Hanna

Colorado School of Mines – Department of Geophysics (Golden, CO) October 2015 – January 2016
Postdoctoral Researcher; Advisor: Prof. Jeffrey C. Andrews-Hanna

Columbia University – Lamont-Doherty Earth Obs. (Palisades, NY) October 2013 – October 2015
Postdoctoral Research Scientist; Advisor: Director Sean C. Solomon

Massachusetts Institute of Technology (Cambridge, MA) July 2007 – September 2013
Research Assistant; Advisor: Prof. Maria T. Zuber

NASA Jet Propulsion Laboratory (Pasadena, CA) November 2006 – December 2007
Lunar and Mars Mission Concepts – Systems Engineer

Ball Aerospace and Technologies Corporation (Washington, DC) May 2006 – August 2006
Legislative Affairs (Intern)

The Boeing Company – Integrated Defense Systems (Houston, TX) May 2005 – August 2005
NASA Launch Systems, Space Shuttle Ascent – Guidance, Navigation, and Control (Intern)

EDUCATION

Massachusetts Institute of Technology (Cambridge, MA) July 2007 – September 2013
Department of Earth, Atmospheric and Planetary Sciences
Doctor of Philosophy in Planetary Geophysics; Advisor: Vice President and Prof. Maria T. Zuber
Thesis: “Geophysical Evolution of Planetary Interiors and Surfaces: Moon and Mars”
Master of Science in Geobiology; Advisor: Prof. Tanja Bosak
Thesis: “Characteristics of Cone-forming Cyanobacteria and Implications for the Origin of Conical Stromatolites”

University of Michigan (Ann Arbor, MI) August 2002 – May 2006
Department of Aerospace Engineering
Bachelor of Science in Engineering – Aerospace Engineering

MISSION INVOLVEMENT

- Mercury, Surface, Space Environment, Geochemistry, and Ranging (MESSENGER) – Team Affiliate, 2013–2016
- Gravity Recovery and Interior Laboratory (GRAIL) – Team Affiliate, 2007–2016

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- Lunar Reconnaissance Orbiter (LRO) Lunar Orbiter Laser Altimeter (LOLA) – Team Affiliate, 2007–2016

RESEARCH TOOLS

- Numerical modeling: predictive modeling, parallel processing, finite element modeling, spherical harmonic analysis
- Data analysis: gravity, topography, image, and spectral data
- Laboratory collection of biological samples from field environments, extraction and analysis of RNA, DNA, proteins, and chlorophyll

TEACHING

- EEPS 2910H: Geophysical Phenomena Across the Solar System (Brown University, Spring 2022)
- EEPS 1745: Team Project Course in Planetary Science (Brown University, Spring 2021)
- EEPS 1810: Physics of Planetary Evolution (Brown University, Fall 2020)
- EEPS 2400: Life Beyond Earth (Brown University, Spring 2020)
- GEOL 1950H: Gravitational Fields and Data Analyses (Brown University, Fall 2019)
- GEOL 2910H: Geophysics of the Inner Solar System (Brown University, Fall 2018)
- Origin and History of the Moon: Core to Crust. The Paradigm for Lunar Formation and Evolution (Rutgers 2017, Guest Lecturer)
- How to Build a Solar System: Physics, Chemistry and Biology of Formation (MS Governor's School 2015, Course Instructor)
- Geodynamics (MIT/WHOI Spring 2010, 2012, 2013, Guest Lecturer)
- Essentials of Geobiology (MIT Fall 2012, Teaching Assistant)
- Physics and Chemistry of the Terrestrial Planets (MIT Fall 2009, Teaching Assistant)
- Building Earth-like Planets (MIT Fall 2008, Guest Lecturer)
- Asteroids and Small Bodies (MIT Fall 2007, Guest Lecturer)

FUNDING

Brown University SEED Program	2022–2023
<i>The Habitability of Exoplanets</i> (\$90K)	
P.I. Alexander J. Evans	
NASA Solar System Workings Program	2020–2023
<i>Origins of the Lunar Asymmetry</i> (\$440K)	
P.I. Alexander J. Evans	
NASA Lunar Data Analysis Program	2020–2023
<i>Quantitative Assessment of the Distribution of Lunar KREEP Material</i> (\$380K)	
P.I. Alexander J. Evans	

MENTORING

• Dean Khan (Postdoc, Brown)	Exoplanets and habitability	starting Fall 2022
• Imani Guest (PhD, Brown)	Geochemistry and policy	2022–Present
• Carol Hundal (PhD, Brown)	Planetary gravity	2021–Present

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• Janie Levin (PhD, Brown)	Planetary geophysics	2021–Present
• Fiona Nichols-Fleming (PhD, Brown)	Planetary geophysics/accretion	2019–Present
• Matthew Jones (PhD, Brown)	Planetary geophysics	2018–Present
• Matthew Weller (Postdoc., Brown)	Exoplanets and habitability	2019–2021
• Evan Bjonnes (PhD, Brown)	Impact cratering	2019–2021
• Eleanor Alvarez (Summer Res., Brown)	Exoplanets and habitability	2020
• Sean Wiggins (PhD, Brown)	Impact cratering	2019–2020
• Joel Wilner (MS, Brown)	Planetary geophysics/cryosphere	2018–2020
• Malik Walker (Summer Res., Brown)	Lunar geophysics	2019
• Anna Zuckerman (BS, Brown)	Solar System chronology	2019
• Sharon Newman (PhD, MIT)	Geobiology	2013–2014
• Xinchu Yin (visiting undergraduate, MIT)	Geobiology and microbiology	2012
• B. Dylan Bannon (undergraduate, MIT)	Geobiology and microbiology	2009–2010

HONORS AND AWARDS

- Columbia University, Provost's Postdoctoral Research Scholar, 2013–2015
- National Association of Graduate-Professional Students, Lifetime Achievement Award, 2011
- Massachusetts Institute of Technology Presidential Fellow Award, 2007–2008
- University of Michigan Outstanding Student Leader, Honorable Mention, 2006
- University of Michigan Dean's List and University Honors, 2003–2006
- University of Michigan ScholarPOWER Banquet, Honoree, 2002–2006
- University of Michigan Aerospace Engineering Landes Class Prize in Technical Communications, 2004

UNIVERSITY ACTIVITIES AND SERVICE

- Brown University DEEPS, Planetary Science Reading Group, *Organizer*, 2021–Present
- Brown University DEEPS, Curriculum Committee, *Member*, 2021–Present
- Brown University DEEPS, Faculty Search Committees, *Member*, 2020–Present
- Brown University DEEPS, Department Colloquium Series Committee, *Member*, 2020–Present
- Brown University DEEPS, Lincoln Field Renovation Planning Committee, *Member*, 2019–Present
- Brown University DEEPS, Department Colloquium Series, *Chair*, 2020
- Brown University DEEPS, Research Experience for Undergraduates Program, Faculty Advisor, 2019–2020
- Brown University, Womxn in STEM Symposium, Judge, 2019
- Brown University DEEPS, Space Committee, *Member*, 2019
- Brown University DEEPS, Department Colloquium Series, *Co-Chair*, Spring 2019
- University of Arizona LPL, Committee for Red Team Proposal Reviews, *Member*, 2017–2018
- University of Arizona LPL, *Postdoctoral Representative to Faculty*, 2017–2018
- MIT Student Advisory Committee on Presidential Search, *Member*, 2012
- MIT Joint Student Task Force on Presidential Search, *Co-Chair*, 2012
- MIT Corporation Joint Advisory Committee, *Member*, 2011–2012
- MIT Institute Faculty Meetings, 2011–2012
- MIT Graduate Student Council, *President*, 2011–2012
- MIT Office of the Dean for Graduate Education Advisory Board, *Member*, 2011–2012
- MIT Graduate Student Council - Student Space Task Force, *Co-Chair*, 2010–2012

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- MIT Walker Memorial Assessment Task Force, *Co-Chair*, 2010–2012
- MIT Committee on Graduate Programs, *Member*, 2009–2011
- MIT Graduate Student Council, *Chair of Legislative Action*, 2008–2011
- MIT EAPS Graduate Student Advisory Council, *President*, 2008–2009
- MIT Committee on Student Life, *Member*, 2008–2009
- MIT Graduate Student Council, *Chair of Community Engagement Task Force*, 2008–2009
- Sigma Gamma Tau (Aerospace Honor Society), *Member*, 2005–Present
- The Epeians (Leadership Honor Society), *Member*, 2004–Present
- Students for Exploration and Development of Space (UMSEDS), *Co-Founder*, 2005–2006
- University of Michigan Engineering Council (UMEC), *President*, 2005–2006
- University of Michigan Engineering Council (UMEC), *Director of University Relations*, 2003–2005

PROFESSIONAL ACTIVITIES AND SERVICE

- Advancing IDEA in Planetary Science, Panel Member and Session Co-Chair, 2022
- National Society of Black Physicists, *Earth and Planetary Sciences Co-Chair*, 2020–Present
- KISS Next-Generation Planetary Geodesy Workshop, 2021–Present
- Planetary Science and Astrobiology Decadal Survey, *Mercury and the Moon Panel*, 2020–2022
- Journal Peer Reviewer (*JGR, GRL, Nature, Science*), 2018–Present
- International Music by Women Festival, *Executive Committee*, 2016–Present
- NASA, *Proposal Reviewer*, 2014–Present
- Lunar Exploration Analysis Group (LEAG), *Working Group Documentarian*, 2019
- Deutsche Forschungsgemeinschaft (German Research Foundation), *Proposal Reviewer*, 2015/2019
- American Association for the Advancement of Science (AAAS), *Member*, 2012–Present
- American Geophysical Union (AGU), *Member*, 2012–Present
- AGU Publications, *Reviewer*, 2014–Present
- Lunar and Planetary Science Conference, *Session Co-Chair*, 2017.
- American Geophysical Union (AGU) Session 7177: Judging a Book by its Cover: From surface observations to planetary interiors, *Primary Convener*, 2015
- Student Mentoring, 2009–2014
- Boston Graduate Leadership Organization, 2010–2013
- Geological Society of America (GSA), *Member*, 2010–2012
- Ivy+ Graduate Summit, *Host and Organizer*, 2011–2012
- US-Russia Kremlin Fellows Program, *Fellow*, 2011
- Public Talk for Boston Debate League – Public School Outreach, 2011
- MIT Open House – Outreach on Planetary Science, 2011
- National Association of Graduate-Professional Students (NAGPS), *Imm. Past President*, 2010–2011
- National Association of Graduate-Professional Students (NAGPS), *National Conference Director*, 2010
- National Association of Graduate-Professional Students (NAGPS), *President and CEO*, 2009–2010
- National Association of Graduate-Professional Students (NAGPS), *Ombudsman*, 2009
- National Association of Graduate-Professional Students (NAGPS), *Regional Conference Comm.*, 2009
- NASA Jet Propulsion Laboratory – Public School Outreach, 2006
- National Association of Engineering Student Councils (NAESC), *National Vice President*, 2005–2006
- National Association of Engineering Student Councils (NAESC), *Regional Vice President*, 2003–2005

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PUBLICATIONS

Underline indicates students and postdoctoral associates advised by me.

- Bjornes, E. M., A. Cutler, E. Das, M. J. Jones, F. Nichols-Fleming, M. B. Weller, A. J. Evans, A Giant Impact Origin for Lunar Crustal Asymmetry (*in prep.*), *JGR Planets*.
- W. Liang, J. C. Andrews-Hanna, and **A. J. Evans** (*in prep.*), The Missing Craters in the Lunar Mare Region, *Journal TBD*.
- Evans, A. J.**, J. C. Andrews-Hanna, K. Miljkovic, E. Bjornes, and D. P. Moriarty (*in prep.*), The Lunar Geochemical Asymmetry, *GRL/JGR*.
- Evans, A. J.** and J. C. Andrews-Hanna (*in prep.*), Climate Controlled Volcanism on Mars.
- M. Jones, F. Nichols-Fleming, A. J. Evans, and B. C. Johnson (*in prep.*), A solution to the Lunar COM-COF, *Journal TBD*.
- F. Nichols-Fleming, A. J. Evans, and B. C. Johnson (*in prep.*), Short-lived Lunar Dynamos Driven by the Accretion of Cold Impactor Material, *JGR Planets*.
- M. B. Weller, A. J. Evans, D. E. Ibarra, A. V. Johnson, and T. J. Kukla (*in prep.*), An Ancient Venus Atmosphere: Atmospheric N₂ Explained by Early Plate Tectonics, *Nature Astro*.
- Jones, M. J., A. J. Evans, B. C. Johnson, M. B. Weller, J. C. Andrews-Hanna, S. M. Tikoo, and J. T. Keane (2022), Origin of the Lunar Procellarum KREEP Terrane, *Science Advances*, 8, eabm8475.
- Bjornes, E. M., B. C. Johnson, E. A. Silber, K. N. Singer and **A. J. Evans** (2022), Ice shell structure of Ganymede and Callisto based on impact crater morphology, *JGR – Planets*, 127, 10.1029/2021JE007028.
- Nichols-Fleming, F., A. J. Evans, B. C. Johnson, and M. M. Sori (2022), Porosity Evolution in Metallic Asteroids, Implications for the Origin and Thermal History of Asteroid 16 Psyche, *JGR Planets*, 127, e2021JE007028.
- Evans, A. J.** and S. M. Tikoo, An episodic high-intensity lunar core dynamo. *Nat Astron* (2022). <https://doi.org/10.1038/s41550-021-01574-y>
- Tikoo, S. M. and **A. J. Evans**, Planetary Dynamos and Magnetic Fields of the Inner Solar System (2022), *Annual Review of Earth and Planetary Sciences*.
- Bjornes, E. M., B. C. Johnson, and **A. J. Evans** (2021) Estimating Venusian Thermal Conditions Using Multiring Basin Morphology, *Nature Astronomy*, doi: 10.1038/s41550-020-01289-6.
- Moriarty, D. P. et al. (with **A. J. Evans**) (2020). Evidence for a Stratified Upper Mantle Preserved within the South Pole – Aitken Basin. *JGR Planets*, 121, e2020JE006589, doi: 10.1029/2020JE006589
- Andrews-Hanna, J. C., R. C. Weber, **A. J. Evans**, I. Garrick-Bethell, R. E. Grimm, Y. Ishihara, S. Kamata, J. T. Keane, W. S. Kiefer, M. Laneuville, I. Matsuyama, P. McGovern, G. Neumann, M. Siegler, and P. Warren (*in rev.*), The structure and evolution of the lunar interior, *New Views of the Moon 2*.
- Johnson, B. C., M. M. Sori, and **A. J. Evans** (2019), Ferrovulcanism and the Origin of Pallasites, *Nature Astronomy*, 284, 1–4, doi:10.1038/s41550-019-0885-x.
- Momper, L., E. Hu, K. R. Moore, E. J. Skoog, M. Tyler, **A. J. Evans**, and T. Bosak (2019), Metabolic versatility in a modern lineage of cyanobacteria from terrestrial hot springs, *Free Radical Biology and Medicine*, doi:10.1016/j.freeradbiomed.2019.05.036.
- Evans, A. J.**, Andrews-Hanna, J. C., Head, J. W., III, Soderblom, J. M., Solomon, S. C., and Zuber, M. T. (2018), Reexamination of early lunar chronology with GRAIL data: Terranes, basins, and impact fluxes. *Journal of Geophysical Research: Planets*, 123, 10.1029/2017JE005421.
- Commentary:** Nimmo, F. (2018), A Sharper Picture of the Moon’s Bombardment History from Gravity Data, *Journal of Geophysical Research: Planets*, 123, 10.1029/2018JE005768.
- Evans, A. J.**, S. M. Tikoo, and J. C. Andrews-Hanna (2018), The Case Against an Early Lunar Dynamo Powered by Core Convection, *Geophys. Res. Lett.*, 45, 98–107, doi:10.1002/2017GL075441.

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- Evans, A. J.** (2017), The GRAIL Mission, In *Encyclopedia of Lunar Science*, edited by B. Cudnik, Springer International Publishing, Cham.
- Byrne, P. K., L. R. Ostrach, C. I. Fassett, C.R. Chapman, B. W. Denevi, **A. J. Evans**, C. Klimczak, M. E. Banks, J. W. Head, and S. C. Solomon (2016), Widespread Effusive Volcanism on Mercury Likely Ended by About 3.5 Ga, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL069412.
- Evans, A. J.**, J. M. Soderblom, J. C. Andrews-Hanna, S. C. Solomon, and M. T. Zuber (2016), Identification of Buried Lunar Impact Craters from GRAIL Data and Implications for the Nearside Maria, *Geophys. Res. Lett.*, 43, doi:10.1002/2015GL067394.
- Soderblom, J. M., **A. J. Evans**, R. J. Phillips, J. C. Andrews-Hanna, H. J. Melosh, K. Miljković, F. Nimmo, D. E. Smith, S. C. Solomon, M. M. Sori, M. A. Wieczorek, and M. T. Zuber (2015), The fractured Moon: Production and saturation of porosity in the lunar highlands from impact cratering, *Geophys. Res. Lett.*, doi:10.1002/2015GL065022.
- Evans, A. J.**, M. T. Zuber, B. P. Weiss, and S. M. Tikoo (2014), A Wet, Heterogeneous Lunar Interior: Lower Mantle and Core Dynamo Evolution, *J. Geophys. Res. Planets*, 119, 1061–1077, doi:10.1002/2013JE004494.
- Bosak, T., S. P. Templer, T.-D. Wu, B. Liang, J.-L. Guerquin-Kern, J. Mui, H. Vali, **A. J. Evans**, M.S. Sim, J. Friedman, V. Klepac-Ceraj (2012), Cyanobacterial Activity and Composition in Modern Conical Stromatolites, *Geobiology*, 10, 5, p384-401, doi: 10.1111/j.1472-4669.2012.00334.x.
- Sim, M. S., B. Liang, A. P. Petroff, **A. J. Evans**, V. Klepac-Ceraj, D. T. Flannery, M. R. Walter, and T. Bosak, (2012). Oxygen-Dependent Morphogenesis of Modern Clumped Photosynthetic Mats and Implications for the Archean Stromatolite Record. *Geosciences*, 2(4), 235259. doi: 10.3390/geosciences2040235;
- Evans, A. J.**, J. C. Andrews-Hanna, and M. T. Zuber (2010), Geophysical Limitations on the Erosion History within Arabia Terra, *J. Geophys. Res.*, 115, E05007, doi:10.1029/2009je003469.
- Sturm II, E. J., M. Deutsch, C. Harmon, R. Nakagawat, R. Kinsey, N. Lopez, P. Kurdle, and **A. J. Evans** (2007), Mission Options Scoping Tool for Mars Orbiters: Mass-Cost Calculator, Jet Propulsion Laboratory, National Aeronautics and Space Administration, 2007.

SELECTED INVITED PRESENTATIONS

- Evans, A. J.** (2023), Geophysics of the Early Moon, Department of Geophysics, Stanford University, Stanford, CA
- Evans, A. J.** (2022), The Lunar Nearside-Farside Asymmetry, Fall Meeting of the American Geophysical Union, Chicago, IL.
- Evans, A. J.** (2022), An episodic high-intensity lunar core dynamo, Fall Meeting of the American Geophysical Union, Chicago, IL.
- Evans, A. J.** (2021), The First Billion Years of Lunar Evolution: A Geophysical Perspective, Earth and Planetary Laboratory, Carnegie Institute
- Evans, A. J.** (2021), The First Billion Years of Lunar Evolution: A Geophysical Perspective, Dept. of Earth Sciences, University of Oxford
- Evans, A. J.** (2021), The First Billion Years of Lunar Evolution: A Geophysical Perspective, Dept. of Earth and Environmental Sciences, Wesleyan University, Middletown, CT.
- Evans, A. J.** (2021), The First Billion Years of Lunar Evolution: A Geophysical Perspective, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA.
- Evans, A. J.** (2020), The First Billion Years of Lunar Evolution: A Geophysics Perspective, Lunar and Planetary Institute, Houston, TX.
- Evans, A. J.** (2020), The Impact Siege of Pre-Habitable Worlds: From the Moon to Our Solar System and Beyond, University of Michigan, Ann Arbor, MI.

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- Evans, A. J.** (2019), The First Billion Years of Lunar Evolution: A Geophysical Perspective, University of Rhode Island, South Kingstown, RI.
- Evans, A. J.** (2019), Legacy of Apollo: Exploring the Dark Side of the Moon with GRAIL and LOLA, WaterFire Arts Center, Providence, RI.
- Evans, A. J.** (2019), Transformative Lunar Science: Lunar Geophysics, Microsymposium 60, Houston, TX.
- Evans, A. J.** (2019), The First Billion Years of Lunar Evolution: A Geophysical Perspective, University of Texas – Institute for Geophysics, Austin, TX.
- Evans, A. J.** (2018), The Curious Case of the Lunar Dynamo, Fall Meeting of the American Geophysical Union, San Francisco, CA.
- Evans, A. J.** (2018), Early History of Rocky Worlds: Moon and Mercury, Department of Sciences and Mathematics, Mississippi University for Women, Columbus, MS.
- Evans, A. J.** (2018), Structures of Rocky Worlds, Mississippi School for Mathematics and Sciences, Columbus, MS.
- Evans, A. J.** (2017), Structures of Rocky Worlds, Department of Earth, Environmental and Planetary Sciences, Brown University, Providence, RI.
- Evans, A. J.** (2017), Early History of the Moon: Crust to Core. Insights from the LOLA and GRAIL Investigations, Department of Earth, Environmental and Planetary Sciences, Brown University, Providence, RI.
- Evans, A. J.** (2017), Early History of the Moon and Mercury: Merging Magma Ocean Models with GRAIL and MESSENGER Data, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA.
- Evans, A. J.** (2017), Early History of the Moon and Mercury: Merging Magma Ocean Models with GRAIL and MESSENGER Data, Northwestern University, Evanston, IL.
- Evans, A. J.** (2016), Merging Magma Ocean Theory with GRAIL and MESSENGER Data, NASA Jet Propulsion Laboratory, Pasadena, CA.

PRESENTATIONS AND ABSTRACTS

Underline indicates students and postdoctoral associates advised by me.

- Evans, A. J.** (2022), Origin and Nature of the Lunar Asymmetry, National Society of Black Physicists National Conference, Charlottesville, VA.
- J. A. Rathbun, E. G. Rivera-Valentín, L. C. Quick, O. J. Tucker, F. Rivera-Hernández, K. E. Mandt, and **A. J. Evans** (2022), Equity and Inclusion in Planetary Science: Next Steps for Improvement, Advancing IDEA in Planetary Science Workshop, Houston, TX.
- C. B. Hundal, **A. J. Evans**, J. F. Mustard, and J. N. Levin (2022), Relative Gravity Profiles of Lunar Impacts in Diverse Geochemical Terranes: Implications for Density and Porosity, 53rd Lunar and Planetary Science Conference, Houston, TX.
- M. J. Jones, **A. J. Evans**, B. C. Johnson, M. B. Weller, J. C. Andrews-Hanna, S. M. Tikoo, and J. T. Keane, (2022), Impact-Catalyzed Formation of the Lunar Compositional Assymetry, 53rd Lunar and Planetary Science Conference, Houston, TX.
- J. N. Levin and **A. J. Evans** (2022), Sub-surface Lunar KREEP Thickness Inferred from Thorium Anomalies associated with Impact Craters, 53rd Lunar and Planetary Science Conference, Houston, TX.
- M. M. Sori et al. (w/ **A. J. Evans**) (2022), Compelling Science Enabled by Gravity Investigations at Mars, 53rd Lunar and Planetary Science Conference, Houston, TX.
- J. T. Keane et al. (w/ **A. J. Evans**) (2022), Next-Generation Planetary Geodesy: Results from the 2021 Keck Institute for Space Studies Workshops, 53rd Lunar and Planetary Science Conference, Houston, TX.

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- W. Liang, J. C. Andrews-Hanna, and **A. J. Evans**, The Missing Craters in the Lunar Mare Region, 53rd Lunar and Planetary Science Conference, Houston, TX.
- F. Nichols-Fleming, **A. J. Evans**, B. C. Johnson, and M. M. Sori (2022), Porosity Evolution of Psyche and Other M-Type Asteroids, 53rd Lunar and Planetary Science Conference, Houston, TX.
- M. B. Weller, **A. J. Evans**, D. E. Ibarra, A. V. Johnson, and T. J. Kukla (2022), Atmospheric Evidence of Early Plate Tectonics on Venus, 53rd Lunar and Planetary Science Conference, Houston, TX.
- Evans, A. J.** (2021), The Paradox of the Lunar Dynamo, National Society of Black Physicists National Conference, *virtual*.
- S. W. Parman, A. J. Evans, M. B. Weller, C. T. Reinhard, D. E. Ibarra, E. C. First, and B. A. Anzures (2021), Assessing the Abundance of Super-Mercuries and Their Habitability, 52nd Lunar and Planetary Science Conference, Houston, TX.
- M. B. Weller, **A. J. Evans**, D. E. Ibarra, A. V. Johnson, and T. J. Kukla (2021), Early (In)Habitability Among Exoplanets: A 1D Parameterized Approach Linking the Mantle-Tectonics-Atmospherics System, Habitable Worlds Workshop, *virtual*.
- F. Nichols-Fleming, **A. J. Evans**, and B. C. Johnson (2021), Short-lived Lunar Dynamos Driven by the Accretion of Cold Impactor Material, 52nd Lunar and Planetary Science Conference, Houston, TX.
- E. M. Bjonnes, B. C. Johnson, and **A. J. Evans** (2021), The Effects of Venus' Thermal Conditions on Multiring Basin Formation, 52nd Lunar and Planetary Science Conference, Houston, TX.
- S. Diniega, S. Brooks, **A. J. Evans**, et al. (2020), Recognizing our colleagues of color in planetary science, Division of Planetary Sciences, *virtual*.
- E. Alvarez, **A. J. Evans**, and S. W. Parman (2020), Using Stellar Abundances to Identify Potentially Habitable Super-Mercury Exoplanets, Leadership Alliance National Symposium, Hartford, CT.
- J. A. Wilner, **A. J. Evans**, R. E. Milliken, and M. M. Sori (2020), Spectroscopy of Domes on Ceres and Implications for Emplacement, 51st Lunar and Planetary Science Conference, Houston, TX.
- M. B. Weller, **A. J. Evans**, D. E. Ibarra, A. V. Johnson, and T. J. Kukla (2020), Exploring the Evolution and Habitability of Planets: Coupling of the Mantle-Atmosphere System, 51st Lunar and Planetary Science Conference, Houston, TX.
- S. W. Parman, A. J. Evans, M. B. Weller, C. T. Reinhard, D. E. Ibarra, E. C. First, and B. A. Anzures (2020), Abundance and Habitability of super-Mercuries, 51st Lunar and Planetary Science Conference, Houston, TX.
- F. Nichols-Fleming, **A. J. Evans**, and B. C. Johnson (2020), Short-lived Lunar Dynamos Driven by the Accretion of Cold Impactor Material, 51st Lunar and Planetary Science Conference, Houston, TX.
- M. J. Jones, **A. J. Evans**, B. C. Johnson, M. B. Weller, J. T. Keane, and S. M. Tikoo (2020), An Impact Origin of the Lunar Procellarum KREEP Terrane, 51st Lunar and Planetary Science Conference, Houston, TX.
- E. M. Bjonnes, B. C. Johnson, and **A. J. Evans** (2020), Determining Venus' Thermal Conditions through Multiring Basin Formation, 51st Lunar and Planetary Science Conference, Houston, TX.
- Evans, A. J.** (2019), The Lunar Origin Story and Implications for the Dynamo, Brown University STEM Jazz Monthly Meeting, Providence, RI.
- M. Walker, E. M. Bjonnes, and **A. J. Evans** (2019), Geophysical Investigation of Lunar Impact Craters with Anomalous Gravitational Signatures, Annual Conference of the National Society of Black Physicists, Providence, RI.
- M. Walker, E. M. Bjonnes, and **A. J. Evans** (2019), Geophysical Investigation of Lunar Impact Craters with Anomalous Gravitational Signatures, Brown Summer Research Symposium, Providence, RI.
- M. B. Weller, **A. J. Evans**, and A. V. Johnson (2019), Exploring the evolution of the coupled mantle-atmosphere system: A 1D parameterized approach, Fall Meeting of the American Geophysical Union, San Francisco, CA.
- M. Walker, E. M. Bjonnes, and **A. J. Evans** (2019), Geophysical Investigation of Lunar Impact Craters with Anomalous Gravitational Signatures, Leadership Alliance National Symposium, Hartford, CT.

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- Evans, A. J.** (2019), The Lunar Geochemical Asymmetry: Implications for KREEP and Magma Ocean Crystallization, 50th Lunar and Planetary Science Conference, Houston, TX.
- Evans, A. J.** (2019), How to Sustain an Early Lunar Core Dynamo via Convection, The Core of the Moon Workshop, Palais du Pharo, Marseille, France.
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