

Dany Waller

Curriculum Vitae

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EDUCATION

2026 (expected) – D.Eng. in Materials Science & Engineering

Johns Hopkins University, Baltimore, MD

2022 – M.S. in Applied Physics (Honors)

Johns Hopkins University, Baltimore, MD

2019 – B.S. in Mathematics

University of Kentucky, Lexington, KY

2019 – B.A. in Physics

University of Kentucky, Lexington, KY

EMPLOYMENT

2021 - Present – Associate Professional Staff

*JHU/APL Space Exploration Sector
Science Analysis & Applications Group*

2020 - 2021 – Graduate Research Assistant

*JHU/APL Space Exploration Sector
Planetary Exploration Group*

2020 - 2021 – Scientific Analyst II

*Science Systems & Applications, Inc.
NASA Goddard Space Flight Center Geodesy and Geophysics Laboratory (61A)*

RESEARCH PROJECTS

2024 - Present – *Europa Clipper* PIMS Science Operations Center Lead

2023 - Present - *Lunar Reconnaissance Orbiter (LRO)* Mini-RF Team Affiliate

2022 - Present – *Lunar Vertex* Co-Investigator

2022 - Present – *Lunar Vertex* Magnetometer Instrument Scientist

2021 - 2023 – *Double Asteroid Redirection Test (DART)* Investigation Team

2020 - Present – *Lunar Reconnaissance Orbiter (LRO)* LAMP Team Affiliate

AWARDS AND HONORS

2025 – *Europa Clipper* PIMS Special Achievement Award

JHU/APL

2024 – *Lunar Vertex* Special Achievement Award

JHU/APL

2023 – *DART* Special Achievement Award

JHU/APL

2021 – 2nd place in NESF/ELS 2021 Student Poster Competition

NASA SSERVI

2020 – 5 Sigma Physicist

American Physical Society (APS)

2019 – Student Impact Award

Omicron Delta Kappa Nu Circle

2019 – Outstanding Senior on *UK at the Half*

University of Kentucky

SERVICE

2024 - present – Planetary Science Section Secretary

Asia Oceania Geosciences Society

2022 - 2024 – Intern Mentor

JHU/APL CIRCUIT program

2020 - 2021 – Intern Mentor

NASA Goddard Association of Postdoctoral and Early Career Scholars (NGAPS+)

2020 - 2021 – Science Mission Directorate Bridge Program Committee Member

NASA Goddard Space Flight Center (GSFC)

2018 - 2020 – STEM Policy Advocate

American Physical Society (APS)

PUBLICATIONS

Waller, C.D., Espiritu, R.C., Tinsman, C., Nair, H., Ernst, C.M., Daly, R.T., Barnouin, O.S., Zinzi, A., Chabot, N., Rivkin, A., Moskovitz, N., Osip, D., Lister, T., Ryan, E., and Ryan, W. (2024). Science Product Pipelines and Archive Architecture for the DART Mission. *Planetary Science Journal*. doi:10.3847/PSJ/ad5959

Waller, C.D., Cahill, J.T.S., Retherford, K.D., Hendrix, A.R., Allen, R.C., Vines, S.K., Meyer, H.M., Wirth-Singh, A.A. (2022). Ultraviolet and Magnetic Perspectives at Reiner Gamma and the Implications for Solar Wind Weathering. *Frontiers in Astronomy and Space Sciences*. doi:10.3389/fspas.2022.926018

Waller, C.D., Strauss, B.E. (2022). Magnetometry. In B.M. Cudnik (Ed.), *Encyclopedia of Lunar Science* (1st ed.). Springer. doi:10.1007/978-3-319-05546-6

CONFERENCES

Waller, C.D., Rorschach, K., Stautberg, A., Cahill, J.T.S., Izquierdo, K., Shea, E. (2024, December 9-13). *Designing a Network of Environmental Monitoring Stations to Combine Lunar Geophysics and Space Weather Investigations*. American Geophysical Union Fall Meeting, Washington, DC.

Waller, C.D., Vines, S.K., Anderson, B.J., Blewett, D.T., Ocasio, A.M., Cahill, J.T.S., Tikoo, S.M., Jahn, J.-M. (2023, December 11-15). *Magnetic Gradiometry and Ongoing Modeling Efforts for the Lunar Vertex Mission*. American Geophysical Union Fall Meeting, San Francisco, CA.

Waller, D., Cahill, J.T.S., Hendrix, A.R., Retherford, K.D., Stockstill-Cahill, K. (2023, October 1-6). *Space Weathering Trends in Ultraviolet Wavelengths of Lunar Swirls in Highlands and Mare*. 55th AAS Division for Planetary Science Conference, San Antonio, TX. Abstract #101.03.

Burke, P., **Waller, C.D.** (2023, May 15-18). *The Influence of Gravity and Magnetic Fields on Brine Formation and Habitability Across the Solar System*. Brines Across the Solar System: Ancient and Future Brines, Reno, NV. Abstract #2012.

Waller, C.D., Espiritu, R.C., Nair, H., Ernst, C.M., Daly, R.T., Barnouin, O.S. (2023, April 03-07). *Automated Data Processing and Image Quality Analysis for the DART DRACO Instrument*. 8th IAA Planetary Defense Conference, Vienna, Austria.

Waller, C.D., Vines, S.K., Anderson, B.J., Blewett, D.T., Ocasio, A.M., Cahill, J.T.S., Tikoo, S.M., Jahn, J.-M. (2023, March 13-17). *Magnetic Gradiometry and Ongoing Modeling Efforts for the Lunar Vertex Mission*. 54th Lunar and Planetary Science Conference, The Woodlands, TX. Abstract #1820.

Waller, C.D., Espiritu, R.C., Nair, H., Ernst, C.M., Daly, R.T., Barnouin, O.S. (2023, March 13-17). *Automated Data Processing and Image Quality Analysis for the DART DRACO Instrument*. 54th Lunar and Planetary Science Conference, The Woodlands, TX. Abstract #1823.

Waller, D., Cahill, J.T.S. (2022, July 19-21). *Variegated Space Weathering Expression Classification Across Reiner Gamma in Preparation for Lunar Vertex*. NASA Exploration Science Forum, Boulder, CO. Abstract #66.

Waller, D., Cahill, J.T.S., Retherford, K.D., Hendrix, A.R. (2022, March 7-11). *Solar Wind Compression of the Magnetic Anomaly at Reiner Gamma and Potential Weathering Patterns Observed in the Ultraviolet*. 53rd Lunar and Planetary Science Conference, The Woodlands, TX. Abstract #2670.

Waller, D., Cahill, J.T.S., Meyer, H. (2022, February 17). *Modeling Temporal Variations in Solar Wind Conditions at Reiner Gamma: Preparations for Lunar Vertex*. 14th Lunar Surface Science Workshop: Heliophysics Applications Enabling and Enabled by Human Exploration of the Lunar Surface, held virtually. Abstract #1022.

Waller, D., Cahill, J.T.S., & Wirth-Singh, A. (2021, July 20-23). *Investigation of Magnetic Fields Associated with Various Lunar Swirls Observed in The Far-Ultraviolet*. Joint NASA Exploration Science Forum & European Lunar Symposium, held virtually due to COVID-19.

INVITED TALKS

+ **Waller, C.D.**, Cahill, J.T.S., Hendrix, A.R., Retherford, K.D., Stockstill-Cahill, K. (2023, December 11-15). *Space Weathering Trends in Ultraviolet Wavelengths of Lunar Swirls in Highlands and Mare* [Conference presentation]. American Geophysical Union Fall Meeting, San Francisco, CA.

+ Waller, C.D. (2022). *Solar Wind Compression of the Magnetic Anomaly at Reiner Gamma and Potential Weathering Patterns Observed in the Ultraviolet* [Colloquium]. NASA GSFC Geospace Physics Laboratory, Greenbelt, MD.