Samuel B. Harris | Ph.D. Student

Department of Earth, Atmospheric, and Planetary Science

Purdue University

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EDUCATION

Ph.D. Earth, Atmospheric, and Planetary Science *Expected 2029*

Purdue University, West Lafayette, IN

B.S. Geosciences: Geology Concentration *2024*

Florida Atlantic University, Boca Raton, FL

RESEARCH

Graduate Research Assistant *2024-Current*

Purdue University, West Lafayette, IN

Advisor: Dr. Ali Bramson

- Currently investigating how to best leverage radar observations to improve our understanding of subsurface conditions on Earth, Mars, and other planetary bodies.

Undergraduate Research Assistant *2023-2024*

Florida Atlantic University, Boca Raton, FL

Advisor: Dr. Xavier Comas

- Investigated subsurface biogenic gas production within peatland environments through a combination of field observations and laboratory experiments.

Field Research Technician *2023*

Florida Atlantic University, Boca Raton, FL

- Conducted geophysical and hydrogeologic field research as part of an NSF EAR Hydrological Science project to investigate the hydrological dynamics of a series of peat bogs in northern Maine.

Field Research Technician *2023*

Florida Atlantic University, Boca Raton, FL

- Conducted biogeochemical field research as part of an NSF GP-IMPACTS project to investigate the impact of dynamic biogenic gas production in peat on the geomorphology of the Everglades.

AWARDS

George Washington Carver Fellowship *2024*

Purdue University Presidential Excellence PhD Award *2024*

Purdue College of Science Graduate Student Travel Award *2024*

CONFERENCE PRESENTATIONS

Harris, S.B., McGlasson, R. A., Bramson, A. M. (2025), Effects of thin layers on radar observations of the Martian polar layered deposits: An integrated approach using experiments, simulations, and spacecraft observations, *EPSC-DPS 2025*

Harris, S. B., McGlasson, R. A., Bramson, A. M. (2025), Radar Reflections of Packets of Sub-Resolution Dust Layers Within Ice in Martian Analog Experiments, *56th LPSC.*

SERVICE

Purdue Graduate Student Government *2025*

Grant Review and Allocations Committee

SKILLS

ArcGIS, ENVI, GPRMax, GPRPy, Python, XFdtd