

Julie Brisset

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Education

Ph.D. Physics, University of Braunschweig, Germany (2014)

M.Sc. Aerospace Engineering, Technical University of Munich, Germany (2005)

M.Sc. Aerospace Engineering, ISAE-SUPAERO, France (2005)

Additional training: International Space University, Space Studies Program

Professional Experience

- *Research Faculty (Associate In)*, Florida Space Institute, UCF (2016–present) – Leading research programs in planetary science, microgravity experiments, and in-situ resource utilization.
- *Director (Interim)*, Florida Space Institute, UCF (2021–2025) – Led a multidisciplinary space research institute and managed research, operational, and strategic activities, including the closeout of the Arecibo Observatory program.
- *Deputy Director*, Florida Space Institute, UCF (2021) – Oversaw research staff and supported institute strategy and growth.
- Earlier roles include postdoctoral research (UCF) and ISS payload operations engineering (DLR, Germany).

Research Interests

Planetary regolith processes, small-body surfaces and evolution, dust and ice physics, microgravity experimentation, in-situ resource utilization, and laboratory studies supporting planetary missions.

Selected Research & Leadership

- Principal Investigator for NASA, NSF, and commercial research programs in planetary science and ISRU, including management of the NSF-funded Arecibo Observatory program.
- Developed and led CubeSat and suborbital flight experiments for planetary science
- Established and expanded laboratory facilities supporting planetary regolith, ISRU, and microgravity research

Teaching and Mentoring

- Mentored approximately 80 undergraduate and graduate students through research programs, internships, REU activities, and thesis supervision since 2014
- Instructor, Introduction to Astronomy (UCF)

Selected Community Leadership and Professional Service

- Member-at-Large, Dust & Ices, AAS Laboratory Astrophysics Division (2026–present)
- Scientific Organizing Committee, DPS Meetings (2015, 2021)
- Editorial Board Member, Icarus (2023–present)
- Reviewer for Nature Astronomy, ApJ, Icarus, PSJ, and other planetary science journals
- Research Faculty Senator, University of Central Florida (2020–2025)

Awards and Honors

- UCF Luminary Award for research impact (2018)
- College of Engineering and Computer Science Appreciation Award (2017)
- Outstanding First-Year Advocate Award (2016)

Professional Memberships

- American Astronomical Society, Division for Planetary Sciences
- American Astronomical Society, Laboratory Astrophysics Division
- American Geophysical Union

I am honored to be a candidate for the DPS Committee. Since joining DPS as a graduate student, it has been one of the communities that most shaped my professional development, providing opportunities to present research, build collaborations, and serve alongside colleagues across planetary science. I would welcome the opportunity to give back to a community that has played such an important role in my career.

Over the past two decades, I have had the opportunity to contribute to planetary science through research, mentoring, leadership, and community service. As Research Faculty at the Florida Space Institute and former Interim Director of the institute, I have worked with researchers from diverse scientific backgrounds and career stages, helping develop research programs, laboratory facilities, educational initiatives, and collaborative partnerships. These experiences have reinforced my belief that scientific progress depends not only on discoveries, but also on the strength of the community that makes those discoveries possible.

Throughout my career, I have worked to create opportunities for planetary scientists and students to engage directly with laboratory facilities, instrumentation, flight experiments, and mission development activities. From microgravity studies of planetary materials and small-body processes to current work on lunar regolith processes, water ice, and in-situ resource utilization, I have seen how hands-on research experiences can foster collaboration, innovation, and career development.

One of my priorities would be supporting students and early-career researchers. Mentoring has been among the most rewarding aspects of my career. Since joining UCF, I have worked with undergraduate, master's, and doctoral students through research projects, internships, thesis supervision, and hands-on experimental programs. DPS plays a vital role in fostering the next generation of planetary scientists, and I would like to help strengthen opportunities for participation, professional development, networking, and mentorship across our community.

A second priority is supporting the research infrastructure that enables planetary science. Our field depends on laboratories, facilities, field campaigns, instrumentation, computing resources, and mission-enabling capabilities that require sustained investment and community engagement. Having worked in environments ranging from university laboratories to large research programs and observatories, I appreciate both the value of these resources and the challenges involved in maintaining them. I would welcome opportunities to help DPS support and advocate for the facilities, laboratories, and experimental capabilities that enable scientific discovery and future exploration.

I also believe DPS benefits greatly from international collaboration and interdisciplinary perspectives. Planetary science has become increasingly global, with important contributions from researchers, institutions, and missions around the world. Having studied and worked in both Europe and the United States, I have seen firsthand how scientific partnerships strengthen our community and expand opportunities for researchers at all career stages.

If elected, I would strive to support a welcoming, collaborative, and forward-looking DPS community. I believe our greatest strength lies in the people, partnerships, and scientific capabilities that make planetary exploration possible. I would be honored to contribute my experience in research, mentoring, and scientific leadership to help DPS continue supporting and advancing our community.