



2020 Amelia Earhart Fellow

# Joana Voigt



**Citizenship:** Germany

**Proposed Program:** Planetary Sciences/Planetary Geology at the University of Arizona

Ms. Voigt's Ph.D. links volcanic eruption products to their controlling mechanisms in planetary interiors and utilizes unmanned aerial systems (UAS) in planetary analog environments to develop how similar airborne vehicles can help to develop the frontier of Mars exploration. Throughout the solar system, volcanism is among the dominant processes that form and modify terrestrial landforms and atmospheres; it is an expression of the thermal evolution of planetary bodies, and is a critical factor for determining a planet's habitability.

In the future, Ms. Voigt intends to test robotic technologies for exploring volcanic terrains on the moon, and develop upon Mars Helicopter technology that will be flown with Mars 2020. This will enable new directions in aviation and aerospace exploration during the next phase of her career. Ms. Voigt participates in public outreach activities related to planetary sciences.