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## **Ankündigung eines wissenschaftlichen Gastvortrags**

### **Vortragende**

M. Sc. Rachael Martina Marshal, Universität Münster

### **Vortragstitel**

Understanding the role of the rock in regolith evolution on the Moon through surface roughness

### **Abstract**

In this talk, I will discuss the investigation of localized regolith evolution on airless bodies, by analyzing the surface properties and internal flaws of the precursor material – ejecta boulders. This work is a part of my PhD research, where the first phase focused on investigating boulder surface properties through image ratios from LROC NAC data. The second phase involved an examination of the physical surface roughness of meteorites and asteroid samples, to explore the range of surface textures that ejecta boulders can exhibit and their possible correlation with petrology and composition. I will also discuss my findings from an analysis of the surface roughness of Ries crater samples and its connection to petrology. Heterogeneities in surface texture of ejecta boulders and clasts within boulders, at different spatial scales, likely have implications for the ways in which the surface of these boulders interact with the space weather, i.e., erosional processes, to form characteristic morphologies.

**Datum:** Donnerstag, 13. Februar 2025

**Uhrzeit:** 11:00 Uhr

**Ort:** Physikgebäude P1, Raum O4-217