



EINLADUNG  
zum  
VERA - SEMINAR  
von

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**The Atacama Desert as Mars analog and  
extraterrestrial dust trap**

The Atacama Desert belongs to the driest places on Earth and its soils represent an analog for the extremely dry surface of Mars, where the hyper-arid conditions are one of the main obstacles for life to exist. Furthermore, the stable climate conditions in the Atacama Desert over millions of years have allowed for a continuous accumulation of atmospheric dust resulting in sedimentary records that represent an ideal trap for interplanetary and interstellar material.

We have collected samples from a 4.20 m deep Atacama playa soil profile that we suspect to reach back millions of years in time. Dating of the samples is based on  $^{10}\text{Be}$  measurements conducted at VERA, Vienna. Once their age is determined, we will investigate the correlation of microbial community vs. climatic shifts, search for micrometeorites and for the first continental  $^{60}\text{Fe}$ -signature of nearby supernovae, which left their traces at 2-3 Myr and 6-8 Myr ago.

**Donnerstag, 14. Juni 2018, 16:30 Uhr**

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",  
1. Stock, Victor-Franz-Hess Hörsaal**