

Saal:  
Simulacron-3

10:30

00:30

Day: 4

Track: Science

nA

Title: **Analogue Mission Simulations**

Subtitle: Wait what? Why not digital?

Speaker: **Karsten Becker**

**Short:** *When you plan to send a rover to the moon, there are many things that can go wrong. Some are technical glitches, other are from the organisation. With an Analogue Mission Simulation we try to find those glitches before landing on the moon. In this presentation we plan to talk about the how, why and the neat technical challenges that come with such an event.*

**Long:** An analogue mission simulation (AMS) tries to re-create the simulation as close as possible in a controlled environment. It covers simple things like: - What is the first thing to do when you land on the moon? - How hard is it to remote-control a vehicle in an unknown terrain when the connection sucks? - How can you deal with the delay in communication? - How well can you evaluate the risk involved in driving in certain terrains? - How hard is it to get unstuck when you only have the two main cameras? While we do not know the answers to that question a-priori, the goal of the AMS is to find answers to those. But there are also several technical challenges that need to be overcome, and new technologies that need to be tested.