



# Münchner Physik- Kolloquium

Winter  
2018/19

## The space radiation environment and its implication for human exploration missions

**Dr. Thomas Berger**, *Institut für Luft- und Raumfahrtmedizin, Deutsches Zentrum für Luft- und Raumfahrt (DLR), Köln*

Monday, 19 November 2018, 17:15 h

Hörsaal 2, Physik-Department der TUM, James-Franck-Straße 1, Garching

Besides the influence of the microgravity environment and the psycho-social effects of living in confined space, the space radiation environment and its impact on humans is seen as one of the limiting factors for long duration human space missions. This is especially true for upcoming planned exploration missions outside Low Earth Orbit. Therefore the exact determination of the radiation dose received by humans is a prerequisite for radiation risk estimations and is currently performed with various radiation detector systems on platforms as the ISS, but also for planned future missions as the NASA Orion EM-1 mission to the Moon. This talk will provide an overview of the radiation environment in space, the relevant detector systems applied for its measurements as well as the tools provided for simulation of the radiation field.

## Student event: Meet the speaker

We invite you to a **student-only** discussion-round with Dr. Thomas Berger before his Munich Physics Colloquium talk.

*Be curious and feel free to ask any question.*

Monday, 19 November 2018, 16:00 h

Seminar room PH 3268 (upper floor, new location!), Physik-Department der TUM, James-Franck-Straße 1, Garching

