

## PHYSICAL COLLOQUIUM

### INVITATION

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Monday, 30.11.2020, 4.15 p.m.,

Video Conference: <https://meeting.uol.de/b/anj-2vc-j6s-fwe>

speaks

**Prof. Dr. Jörg Hörandel,**  
**Radboud University Nijmegen,**  
**Vrije Universiteit Brussel, Nikhef**

about

### **“Physics and origin of the highest-energy particles in the Universe”**

The Earth is continuously exposed to a flux of high-energy particles from outer space. Cosmic rays are ionized atomic nuclei with energies far above the energies which are achieved at Earth-bound accelerators. The existence of these particles is raising questions like: what are the sources and acceleration mechanisms? Do we understand the physics and the interactions of those particles? How large is the fraction of protons, photons, and neutrinos at highest energies? We are seeking answers to those questions with our investigations with the Pierre Auger observatory in Argentina. We will present the actual status of our research and give an outlook to the ongoing upgrade of the observatory.

All interested persons are cordially invited.

Sgd. Prof. Dr. Jutta Kunz