

## PHYSIKALISCHES KOLLOQUIUM

**Sommersemester 2024**

Das Kolloquium findet (soweit unten nicht anders angegeben) jeweils montags **jeweils montags um 16:15 Uhr online via Zoom** statt.

(Der jeweilige Link wird noch zur Verfügung gestellt.).

**24.06.2024**

Prof. Dr. Alexander Huss  
CERN, Department of Theoretical Physics

**Precision phenomenology to lighten the path to discoveries**

### **Abstract**

High-energy colliders, such as the Large Hadron Collider (LHC) at CERN, allow to probe the fundamental laws governing the interactions among elementary particles at unprecedented energies. A full exploitation of this machine critically relies on the precision at which we can confront the experimental data with theory predictions: to consolidate our description of nature, increase the sensitivity to subtle deviations, and uncover clues that guide us towards a more complete picture. I describe techniques and recent results for precision calculations and discuss their impact for particle phenomenology.

Für die Dozentinnen bzw. Dozenten der Fakultät

Prof. Dr. Hinkov, Prof. Dr. Hinrichsen, Prof. Dr. Porod, Dr. Ünzelmann und Hr. Kuhr