

PHYSIKALISCHES KOLLOQUIUM

Wintersemester 2022/23

Das Kolloquium findet (soweit nicht anders angegeben) **jeweils montags um 17:15 Uhr in Präsenz im Röntgen-Hörsaal des Physikalischen Instituts, Hubland Campus Süd, Universität Würzburg und online via Zoom statt.**

Link zum Zoom-Raum:

<https://go.uniwue.de/physkolloqzoom>



07.11.2022

Vortrag Online via Zoom, Übertragung in den Röntgen-Hörsaal

Prof. Dr. Hitoshi Murayama
University of California, Berkeley Center for Theoretical Physics

Particle Physics – Past, Present, and Future

Abstract

Particle physics has been tremendously successful in deciphering the laws of physics at the most fundamental level, the quest had begun with the discovery of the electron by J.J. Thompson back in 1897. Since then, it took about 80 years to build the theory of the fundamental constituents and their interactions called the Standard Model, and the last predicted particle, the Higgs boson, was discovered in 2012. Yet many profound questions remain. The Standard Model cannot explain dark matter, dark energy, neutrino mass, inflation, origin of matter, origin of flavor, hierarchy of energy scales, and quantum gravity. I will discuss the historical context of particle physics, as well as where the field is headed into its third century.

Für die Dozentinnen bzw. Dozenten der Fakultät

PD. Dr. Meyer, Prof. Dr. Assaad, Dr. Feichtner und Hr. Kögel