

12. Januar 2023

Einladung zum Physikalischen Kolloquium

20.01.2023 **Rolf Heuer, CERN**

**»Celebrating 10 years of the Higgs Boson –
CERN exploring the Early Universe«**

Einführung: U. Nierste

Over more than fifty years particle physics has made tremendous progress in understanding how the microcosm and the early Universe work, culminating in the discovery of the Higgs-Boson ten years ago. Although the Standard model of particle physics has become one of the most successful, most tested scientific ideas, it is not, however, a theory of everything. It leaves many questions unanswered and needs to be embedded into something bigger. The discovery of the Higgs boson, therefore, was an end as well as a beginning. The Higgs is a very special particle and might become one of the best laboratories we have to open the door to physics beyond the Standard Model. The talk will describe the journey to its discovery and the years beyond. It will address some of the open questions and finally try to look into the future.

Der Vortrag findet um **15:45 Uhr im Otto-Lehmann-Hörsaal**, Physik-Flachbau (Geb. 30.22), statt.

Zusätzlich wird der Vortrag im Livestream angeboten:

<https://kit-lecture.zoom.us/j/64839757096>

Meeting ID: 648 3975 7096

Kenncode: 460549