
COLLOQUIA DI DOTTORATO, A.A. 2022/2023

Dipartimento di Fisica, A102
Giovedì 13 Aprile 2023 ore 16:00

The Higgs Boson and the future of Particle Physics

Karl Jakobs
(University of Freiburg)

During the past decade, the experiments at the Large Hadron Collider at CERN have successfully explored a new energy regime at the TeV scale. The excellent performance of the accelerator and of the experiments allowed for the discovery of the long-sought Higgs boson and the measurement of its properties.

In this seminar, a summary of the achieved results, with focus on the Higgs boson, is presented. It will be further discussed how the open key questions of particle physics can be addressed in the near and longer-term future. In this discussion the focus is put on the central role of a future large collider and on possible realisation scenarios.