

CLUSTER OF EXCELLENCE QUANTUM UNIVERSE



QUANTUM UNIVERSE LECTURES

Kai Schmidt-Hoberg (DESY)

"Searches for Dark Matter: Current Status and Prospects"

19, 26 June, and 3 July 2020 at 14.30h

Zoom:

https://zoom.us/j/94436433921?pwd=NFdORzFQRlp4MTg1UURQVFU0R3NWZz09

Abstract:

In these lectures I will discuss different basic ways to search for the elusive dark matter particles experimentally, with a particular focus on the well-established WIMP paradigm. Specifically, I will discuss signatures in direct detection, indirect detection, collider searches as well as astrophysical observables, which are sensitive to large dark matter self-interactions. For each of these different search channels I will (try to) evaluate where we as a community stand today.