

Seminarium Studium Doktoranckiego NCBJ

Thursday, 28 January, 9:00

<https://www.gotomeet.me/NCBJmeetings/phd-seminar>

Speaker:

Ubaldo Cavazos (Studium Doktoranckie NCBJ)

Title:

Unification via vector-like fermions

Abstract:

The pursuit for an ultimate theory of nature has been driving the particle physicists for decades. One popular idea explored over the years is the unification of all the fundamental interactions into one common description. In this talk, I will discuss extensions of the Standard Model in which the gauge coupling unification is achieved by introducing new vector-like fermions and scalars with the masses in the TeV range. I will show how the long-lived particles searches can be employed to derive the mass limits for those exotic particles, and how those limits depend on the particle representation.