Dark Forces at Accelerators



Contribution ID: 20 Type: not specified

10 orders of magnitude lighter - Fundamental physics @ really low energies

Wednesday, 17 October 2012 16:30 (35 minutes)

Although this workshop is mainly concerned with the MeV to GeV scale, new physics may hide at even lower perhaps sub-eV masses. A famous example is the axion which has a sub-eV mass, solves the strong CP problem (appearing at the few 100 MeV scale of QCD) and is also one of the leading dark matter candidates.

Going beyond this example we argue that there exists an excellent 'physics case' motivating the search for axions, but also for more general WISPs (very weakly interacting sub-eV particles). This physics case arises from both experimental and observational evidence as well as the desire to test theoretical model building and opens up new and exciting possibilities for existing and future experiments.

Primary author: JAECKEL, Joerg (University of Durham)

Presenter: JAECKEL, Joerg (University of Durham)

Session Classification: Related searches