

B boson search at KLOE/KLOE-2

Friday 1 October 2021 10:50 (2 hours)

Following the many contributions KLOE-2 has done to Dark Matter (DM) searches, an alternative model, where the Dark Force mediator is an hypothetical leptophobic B boson, in contra-position to the U boson or “dark photon”, is investigated. The B boson couples mainly to quarks and it can be searched in the Φ decay to η -B where B will decay in p_0 -gamma. So far, investigation of the π^0 -gamma invariant mass shows no clear structure belonging to the signal of the DM mediator, hence, an upper limit in the number of events at 90% with CLs the technique will be established for the decay.

What is your topic?

Physics beyond the Standard Model

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