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## Dedicated experiments for feebly interacting particles

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The LHC experiments are designed to discover hypothetical particles with prompt decays. In parallel, meta-stable particles are constrained by cosmological observations. Between these two extremes, there is a gap with particles with moderate lifetimes, connecting hidden sectors and the Standard Model through feeble interactions in “portal” models of dark matter, neutrino masses and other scenarios. The detector design and expected sensitivity of dedicated experiments targeting such particles is reviewed. The focus is on MAPP, the MoEDAL Apparatus for Penetrating Particles, currently under installation at the LHC interaction point 8.

**Primary author:** Dr MITSOU, Vasiliki (Univ. of Valencia and CSIC (ES))

**Presenter:** Dr MITSOU, Vasiliki (Univ. of Valencia and CSIC (ES))

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