

Searching for long-lived particles at the LHC: Sixth workshop of the LHC LLP Community



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The MoEDAL-MAPP Experiment - a Status Report

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The MoEDAL is the LHC's first and until LHC's Run-3, only dedicated search experiment. The current incarnation of MoEDAL is designed to search for highly ionizing avatars of new physics. Starting in the long shutdown MoEDAL will be upgraded with a new sub-detector called MAPP (MoEDAL apparatus for Penetrating Particles). MAPP will give MoEDAL additional sensitivity to mini-charged (mQPs) as well as long lived neutral avatars (LLPs) on physics beyond the Standard Model. We will report results from the current MoEDAL detector and briefly present its program for Run-3. Additionally, we will discuss the MAPP detector which is currently under construction, illustrating its physics reach by several example scenarios involving mQPs and LLPs. Lastly, we will briefly discuss the physics possibilities for MAPP-2 for high luminosity LHC running.

Primary author: PINFOLD, James (University of Alberta (CA))

Presenter: PINFOLD, James (University of Alberta (CA))