

School of Physics and Astronomy

HEP SEMINAR

From Dark Photons to True Muonium



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The nature of dark matter cannot be explained by the standard model of particle physics and remains an open question in physics. With no dark matter signals found at the LHC (yet), interest has been renewed in treating dark matter as a hidden sector with a weak connection to the standard model. Here I will explore searching for the dark photon, a possible portal between dark matter and the standard model, using the LHCb detector. I will also demonstrate how dark photon results can be recast to other models using the Darkcast tool. Finally I will discuss how dark photon search techniques could be used to discover true muonium.

When: Thursday 11 April
Time: 11am
Where: Level 1, Seminar Room 107,
10 College Walk, Clayton

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