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## **Enhanced dark sector production in beam dumps from electromagnetic cascades**

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The strongest constraints on sub-GeV feebly interacting particles are typically derived from beam dump facilities. Historically, these constraints rely on a conservative (under)estimate of the flux focussing only on production within the first interaction length. In this talk I will explain how to consistently include production from the subsequent electromagnetic cascade in the target. Sensitivity can be substantially enhanced at lower masses and weaker couplings (the “lifetime frontier”) by including electromagnetic cascade production.

**Primary authors:** KELLY, Kevin (Texas A&M University); BLINOV, Nikita (York U); FOX, Patrick (Fermilab); MACHADO, Pedro (Fermilab); PLESTID, Ryan (Caltech); ZHOU, Tao (Texas A&M University)

**Presenter:** PLESTID, Ryan (Caltech)

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