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## **Ultra-low material pixel layers for the Mu3e experiment**

The upcoming Mu3e experiment will search for the charged lepton flavour violating decay of a muon at rest into three electrons. The maximal energy of the tracks will be 53 MeV, hence low material budget is a key performance requirement. We will show our approach to meet the requirement of about 1 % of radiation length per detector layer. This includes the choice of thinned active monolithic pixel sensors in HV-CMOS technology, ultra-thin flexible high density interconnects, and Helium gas cooling.

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