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Installing a Milli-charge Particle Detector at LHC P5 SILAS GROSSBERNDT, Columbia Univ, MILLIQAN COLLABORATION — Our collaboration has proposed a dedicated experiment that would detect "milli-charged" particles produced in pp collisions. The experiment, which would be a plastic scintillator array subdivided into three sections, should be sensitive to charges of order $10^{-3}e$ for mass of order 1 GeV and charges of order $10^{-2}e$ for mass of order 10 GeV with 300 fb⁻¹ of integrated luminosity. This greatly extends the parameter space explored for small mass charges above 100 MeV.

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