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SLHC Detector Upgrade R&D Studies for the CMS Hadron Calorimeter FIRDEVS DURU, U. AKGUN, A.S. AYAN, Y. ONEL, University of Iowa, CMS COLLABORATION — The Large Hadron Collider (LHC) is designed to provide a beam energy of 7 TeV and a luminosity of $\mathcal{L} = 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$. Future LHC upgrade scenarios include increasing the luminosity to $\mathcal{L} = 10^{35} \text{ cm}^{-2} \text{ s}^{-1}$. We refer to this upgraded LHC as the SuperLHC (SLHC). An increase in luminosity would require some upgrades to the CMS detector as well because of the very high radiation environment that would be created. In this report we summarize an ongoing *R&D* effort to upgrade the CMS Endcap Hadronic Calorimeter by replacing the scintillator tiles with quartz.

Sarah Eno
U. Maryland

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