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**Detector Upgrade Studies on CMS Endcap Hadronic Calorimeter for SuperLHC** FIRDEVS DURU, The University of Iowa — The Large Hadron Collider (LHC) is designed to provide a beam energy of 7 TeV which corresponds to a luminosity of $10^{34}$ $cm^{-2}s^{-1}$. The future LHC upgrade scenarios include increasing the luminosity to $10^{35}$ $cm^{-2}s^{-1}$. We refer to this upgraded LHC as the SuperLHC (SLHC). The possible increase in luminosity requires some upgrades on the CMS detector as well. In this report we report the latest results from the ongoing R&D studies to upgrade the CMS Endcap Hadronic Calorimeter, by replacing the scintillator tiles with quartz, for the very high radiation SLHC conditions.

Firdevs Duru
The University of Iowa

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