

Overview and Electronics Needs of ATLAS and CMS High Luminosity Upgrades

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The LHC will start up in 2008 and ramp up in luminosity over 3 years to $10^{34} \text{ cm}^{-2} \text{ s}^{-1}$. A series of machine upgrades will continue to increase this, eventually reaching $10^{35} \text{ cm}^{-2} \text{ s}^{-1}$ around 2018. This talk summarises the physics possibilities that high luminosity will open up, and then describe the changes needed to ATLAS and CMS to meet the challenges of the high pile-up of overlapping events and radiation background. Electronics advances are needed throughout the detector and will be emphasized.

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