

Abstract Submitted
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The CDF II eXtremely Fast Tracker Upgrade HEATHER GERBERICH, University of Illinois Urbana-Champaign, CDF COLLABORATION¹ — The CDF II eXtremely Fast Tracker (XFT) is the trigger track processor which reconstructs charged particle tracks in the transverse plane of the CDF II central outer tracking chamber. The XFT tracks are also extrapolated to the electromagnetic calorimeter and muon chambers and are associated to electromagnetic clusters and muon stubs to generate trigger electron and muon candidates. The steady increase of the Tevatron instantaneous luminosity demanded an upgrade of the system to cope with the higher occupancy of the chamber. The XFT upgrade improves track reconstruction by including additional data from the stereo layers of the chamber, which allows a reduction in the level of fake tracks as well as a full three dimensional reconstruction of the tracks. A review of this upgrade is presented.

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