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Identification of Electromagnetic Particles using the Forward Hadron Calorimeter at CMS KEVIN KLAPOETKE, University of Minnesota, CMS COLLABORATION — The detection and identification of electrons and photons will be important for many analyses at the LHC and the design of the CMS crystal electromagnetic calorimeter has been optimized for this purpose. CMS also has a forward hadronic calorimeter (HF) made up of quartz-fiber and iron. We describe how electromagnetic particles can be reconstructed and identified in the HF. Transverse and longitudinal shower shape variables distinguish between electromagnetic particles and jets. We describe the impact of identifying electromagnetic particles for physics analysis, specifically the measurement of the Z boson.

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