

Abstract Submitted
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Sensitivity to New Physics with the γ_{Delayed} + MET Final State

RANDY WHITE, Texas A&M University — The Collider Detector at Fermilab (CDF) continues to search for new particles produced in the high energy proton anti-proton collisions produced at the Fermi National Accelerator Laboratory (Fermilab). In this talk we discuss the search for heavy, long-lived neutral particles, hypothesized by the Supersymmetry theory, that can be created and travel for awhile before decaying into a photon, the particle of light. Since these photons will arrive at the surface of the detector later than photons produced directly in the primary interaction, we can use custom instrumentation to search for these “delayed” photons with a nanosecond timing resolution. We present the results of this search and its implications on the recently discovered Higgs boson.

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