

Abstract Submitted
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Search for long lived neutral particles with the DØ detector TODD ADAMS, Florida State University, DZERO COLLABORATION — The large luminosity sample of more than 400 pb^{-1} accumulated by the DØ experiment at the Tevatron enables searches for new physics which have not previously been possible at hadron colliders. We present a search for a relatively long-lived neutral particle produced in $p\bar{p}$ collisions at 1.96 TeV. This analysis has been optimized for particles decaying into two muons, significantly away from the interaction point but still within the inner portion of the detector. This search begins to probe the excess of such events seen in the NuTeV experiment, as well as to explore the parameter space of supersymmetry with a small R-parity violating coupling.

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