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Search for non-standard model top antitop resonance production in the all-hadronic channel at CDF YURI OKSUZIAN, University of Florida, CDF COLLABORATION — We present an updated result of a search for resonant top-antitop pair production and subsequent decay in the all-hadronic channel. We examine the top-antitop invariant mass spectrum observed in CDF data from 1.96 TeV $p\bar{p}$ collisions at the Fermilab Tevatron. We apply a powerful reconstruction technique where the observed event kinematics are constrained according to the full standard model top-antitop production and decay matrix element. This technique provides excellent mass resolution. Also, probability densities from the per-event matrix element calculation are used as discriminants to reduce and control the large backgrounds of the all-hadronic channel.

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