

Abstract Submitted  
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**Search for a New Particle  $X(\rightarrow b\bar{b})$  Production in Association with a  $W^\pm$  Boson at the Tevatron** YOSHIO ISHIZAWA, University of Tsukuba, CDF COLLABORATION — We present an updated search for a new particle that decays into  $b\bar{b}$  and is produced in association with  $W^\pm$  boson in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV. The search uses a Run II dataset accumulated by the CDF experiment at the Fermilab corresponding to an integrated luminosity of about  $300 \text{ pb}^{-1}$ . We select events with an electron or muon, large missing transverse energy, and two jets, with at least one of the jets  $b$ -tagged. We present results as a function of new particle mass. In particular, we place upper limits on the cross section of  $W^\pm h \rightarrow W^\pm b\bar{b}$  and  $\rho_{TC} \rightarrow W^\pm \pi_{TC} \rightarrow W^\pm b\bar{b}$  production.

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