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CDF results on the search for rare B_d , $B_s \rightarrow \mu^+ \mu^-$ and $X_s \mu^+ \mu^-$ decays

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Results of a CDF search for $B \rightarrow \mu\mu$ decays and the angular analysis of $B \rightarrow X_s \mu^+ \mu^-$ decay are presented using the complete 10/fb dataset collected by the CDF experiment. The $B \rightarrow \mu^+ \mu^-$ analysis is unchanged with respect to the last iteration and 30% more data allow to reach 95% expected upper limits for the branching ratio of 4.2×10^{-9} in the B_d decay and 1.3×10^{-8} in the B_s decay. The results show no evidence for the B_d decay and an indication for a moderate excess of signal-like events over background in the B_s channel, compatible with standard model expectations and other experimental results. The $b \rightarrow s \mu^+ \mu^-$ results include updated measurements of branching fractions, polarization, and muon forward-backward asymmetry in $B \rightarrow K^* \mu^+ \mu^-$ and $\Lambda_b \rightarrow \Lambda \mu^+ \mu^-$ decays.

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