Quantum chromodynamics: string theory meets collider physics



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## Kaluza-Klein gluon in the Bulk Randall-Sundrum model

The Bulk Randall-Sundrum model, where all Standard Model particles except the Higgs are free to propagate in the bulk, predicts the existence of Kaluza-Klein (KK) modes of the gluon with a large branching into top-antitop pairs. We study the production of the lowest KK gluon mode at the Tevatron energy and use the data on the top crosssection from the Run II of Tevatron to put a bound on the mass of the KK gluon.

## **Based on preprint**

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