

Top Production Cross Sections at D0

Tuesday, 28 April 2009 12:05 (20 minutes)

We report on measurements of the $t\bar{t}$ production cross section at a center-of-mass energy of 1.96 TeV at the D0 experiment during Run II of the Fermilab Tevatron collider. We use candidate events in lepton+jets and dilepton final states. In the most sensitive channel (lepton+jets channel), a neural network algorithm that uses lifetime information to identify b-quark jets is used to distinguish signal from background processes. We also present measurements of single top quark production at D0 using several multivariate techniques to separate signal from background: boosted decision trees, bayesian neural networks and matrix elements.

Summary

Primary author: KVITA, Jiri (Faculty of Mathematics and Physics, Charles University)

Presenter: KVITA, Jiri (Faculty of Mathematics and Physics, Charles University)

Session Classification: Heavy Flavours