

Abstract Submitted
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Upper Limits on Cross Sections Using Kinematic Distributions and the Single Top Quark Search at DØ SUPRIYA JAIN, University of Oklahoma, DZERO COLLABORATION — We discuss a statistical analysis method using kinematic distributions to compute the upper limits cross sections based on Bayesian statistics. This method uses a matrix that describes the global uncertainties and their correlations between signal acceptance and backgrounds, and also considers the uncertainties that change the shape of the distributions. As an example we discuss its application to the single top quark search at $\sqrt{s} = 1.96$ TeV in $p\bar{p}$ collisions using data collected by the DØ experiment during Run II of the Fermilab Tevatron collider.

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