

Abstract Submitted
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Initial state gluon radiation studies in Drell-Yan events at the LHC KYOKO YAMANAKA, Iowa State University, ATLAS COLLABORATION
— In the measurement of properties of the top quark and other heavy particles that are produced in proton-proton collisions at the LHC, it is important to account for the effect of initial state gluon radiation (ISR). In order to study ISR at the LHC, we will use a method that has been pioneered by CDF using Drell-Yan events to understand the effect of ISR in top-pair production at the Tevatron. The Drell-Yan process is well suited for ISR studies as it does not suffer from additional final state radiation contributions. We lay out a method in which we determine systematic uncertainties due to ISR by comparing Monte Carlo simulated events to initial data from the ATLAS experiment expected to be taken later this year.

James Cochran
Iowa State University

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