

Abstract Submitted  
for the APR14 Meeting of  
The American Physical Society

**Study of isolated photon production in association with bottom quarks at the Tevatron** ASHISH KUMAR, State University of New York, Buffalo, D0 COLLABORATION — The study of prompt photons produced in association with heavy quarks provides a crucial test of perturbative QCD predictions as well as constraints on parton distribution functions. We present first measurements of the cross section of photon plus bottom quark pair production in proton-antiproton collisions at  $\sqrt{s} = 1.96$  TeV using  $8.7 \text{ fb}^{-1}$  of Tevatron data collected by the D0 experiment. The measurements are compared with theoretical calculations and predictions from Monte Carlo generators.

Robert Hirschy  
University of Virginia

Date submitted: 10 Jan 2014

Electronic form version 1.4