

Abstract Submitted  
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**B Fragmentation and Same Side Kaon Tagger** PIERLUIGI CATAS-  
TINI, INFN Pisa and University of Siena, CDF COLLABORATION — Using  $p\bar{p}$   
collision data at  $\sqrt{s} = 1.96$  TeV collected with the CDF II experiment at the Fer-  
milab we study fragmentation of  $b$  quarks. We measure multiplicities and relative  
fractions of K, pi, p particles in the vicinity of partially reconstructed semileptonic  
decays of B0, B+ and Bs. We then apply this knowledge and Monte Carlo techniques  
to develop B flavor tagging method based on kaons identified near the signal B can-  
didates using the Time-of-Flight and  $dE/dX$  measurements of charged tracks. The  
effective tagging efficiency of the SSKT is predicted for Bs events. The application  
and impact of SSKT on Bs mixing measurement is discussed.

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