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**Measurement of the forward–backward asymmetry of muons coming from the decay of  $W$  bosons with the DØ Detector** SINJINI SENGUPTA, Florida State University, DZERO COLLABORATION — We present a measurement of the forward–backward asymmetry of muons coming from the decay of  $W$  bosons produced in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV collected with the DØ Detector at Fermilab. We discuss the prospects for using the asymmetry to constrain the ratio of  $d$  and  $u$  quark momentum distributions in the proton.

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