

Abstract Submitted
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New Measurements of Upsilon Spin Alignment at CDF NI-HARIKA RANJAN, Purdue University, CDF COLLABORATION — We report the first measurement that fully specifies in three dimensions the angular distributions of muons from $\Upsilon(1S, 2S, 3S)$ resonances produced in 1.96 TeV $p\bar{p}$ collisions and reconstructed by the Collider Detector at Fermilab. These measurements have been performed using multiple coordinate frames, allowing tests of self-consistency to be performed, and provide the first measurements of the $\Upsilon(3S)$ spin alignment. The results, which use 7 fb^{-1} of data, offer detailed information to shed light on the puzzling picture of previous experimental measurements and theory predictions.

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