Abstract Submitted for the APR11 Meeting of The American Physical Society

Measurement of the lifetime of the B_c meson using fully reconstructed $B_c \to J/\psi\pi$ decays at CDF HAO SONG, University of Pittsburgh, CDF COLLABORATION — The CDF collaboration reports the first measurement of the B_c meson lifetime obtained using a fully reconstructed final state. The B_c meson is unique in being composed of two relatively heavy and distinct quarks which can both decay weakly contributing to its lifetime. Decays into a J/ψ meson and a charged pion are reconstructed with sufficient statistics and purity to provide a B_c lifetime measurement of comparable precision to previous determinations.

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Date submitted: 13 Jan 2011 Electronic form version 1.4