

Measurement of B_c lifetime

The lifetime of the B_c^- meson is measured using the exclusive $B_c^- \rightarrow J/\psi \pi^-$ decay with data from $p\bar{p}$ collisions with an integrated luminosity of 6.7 fb^{-1} recorded by the CDF detector at the Fermilab Tevatron. This is the first measurement of the B_c^- meson lifetime in a fully-reconstructed hadronic channel, and the result is in agreement with previous results. The lifetime of the B_c^- meson is measured to be: $c\tau(\text{bc}) = 136 \pm 14(\text{stat}) \pm 8(\text{syst}) \mu\text{m}$

Primary author: SONG, Hao (University of Pittsburgh)

Presenter: SONG, Hao (University of Pittsburgh)