

Abstract Submitted
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A precise measurement of the B_s^0 lifetime ALBERTO SANCHEZ, CINVESTAV, Mexico, DZERO COLLABORATION — We report the lifetime measurement of the flavor-specific B_s^0 meson decay $B_s^0 \rightarrow D_s^- \mu^+ \nu X$, using approximately 400 pb^{-1} of data collected by the DØ detector during 2002–2004. We have reconstructed 5176 $D_s^- \mu^+$ candidate events, from which we have measured the B_s^0 lifetime with a combined statistical and systematic uncertainty of less than $16 \mu\text{m}$ which is the currently most precise measurement of the B_s^0 lifetime.

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