Measuring $-2\beta_s$ with $B_s^0 \rightarrow J/\psi f_0(980)$ Decays at LHCb\(^1\) LIMING ZHANG, SHELDON STONE, Syracuse University, LHCb COLLABORATION —

We present the capability of measuring the CP violating phase in $B_s^0$ mixing ($-2\beta_s$) using $B_s^0 \rightarrow J/\psi f_0(980)$ and $B_s^0 \rightarrow J/\psi \phi$ decays at LHCb. Both CDF and D0 have investigated $-2\beta_s$ using $B_s \rightarrow J/\psi \phi$ decays. The central value has been found far from the Standard Model predictions, but the error is large and significance of the possible discrepancy is in the $2$-$3\,\sigma$ range.

\(^1\)On behalf of the LHCb Collaboration