

Study of the $B \rightarrow Lc \bar{L} K$ decay at LHCb

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A charmed baryon with strange quark, $\Xi_{bc}(2930)$, was found in the $B \rightarrow Lc \bar{L} K$ decay at B-factories, yet the study of $Lc \bar{K}$ pairs produced directly in pp collisions at LHCb finds two baryon states, $\Xi_{bc}(2923)$ and $\Xi_{bc}(2939)$, at this mass region. These two states are confirmed by a recent study of $B \rightarrow Lc \bar{L} K$ at LHCb using pp collision data at 13 TeV. Other features in the $Lc \bar{K}$ mass spectrum are also studied. The relative branching fraction of the channel is reported with respect to $B \rightarrow DDK$.

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