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Measurement of $\mathcal{B}(\Xi_c^0 \to \pi^- \Lambda_c^+)$ MICHAEL WILKINSON, Syracuse University, LHCB COLLABORATION — The Ξ_c^0 baryon is unstable and usually decays into charmless final states by the $c \to su\bar{d}$ transition. It can, however, also disintegrate into a π^- meson and a Λ_c^+ baryon via s-quark decay or via $cs \to dc$ weak scattering. The interplay between the latter two processes governs the size of the branching fraction $\mathcal{B}(\Xi_c^0 \to \pi^- \Lambda_c^+)$. We here present the first measurement of $\mathcal{B}(\Xi_c^0 \to \pi^- \Lambda_c^+) = (0.55 \pm 0.02 \pm 0.18)\%$, where the first uncertainty is statistical and second systematic, published 12 October 2020 in PRD. It is compatible with the larger of the theoretical predictions that connect models of hyperon decays using partially conserved axial currents and SU(3) symmetry with those involving the heavy-quark expansion and heavy-quark symmetry. In addition, we present the second measurement of the branching fraction of the normalization channel, $\mathcal{B}(\Xi_c^+ \to pK^-\pi^+) = (1.135 \pm 0.002 \pm 0.387)\%$.

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