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K-pi scattering lengths from lattice QCD

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We present the recent lattice QCD calculation of $K\pi$ $I=3/2$ and $I=1/2$ scattering lengths by the RBC-UKQCD collaboration. Our calculation is the first lattice calculation of these quantities performed using physical point ensembles [1]. This allows us to bypass the error due to chiral extrapolation, which in current calculations is the dominant source of systematic errors [2,3,4,5]. Preliminary results are presented and compared to those from earlier studies which were obtained at heavier pion masses and extrapolated to the physical point.

References

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