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The determination of r_0 and r_1 in $N_f=2+1$ QCD.

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We determine the scales r_0 , r_1 , and the ratio r_0/r_1 for $2 + 1$ flavour QCD ensembles generated by CLS. These scales are determined from an improved definition of the static force which we measure using Wilson loops and furthermore use to study the shape of the static potential. Our analysis involves various continuum and chiral extrapolations of data that covers pion masses between 130 MeV and 420 MeV and five lattice spacings down to 0.038 fm.

Topical area

Hadronic and Nuclear Spectrum and Interactions

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