

Scattering length from BS wave function inside the interaction range

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We evaluate scattering lengths by use of a scattering amplitude calculated with the Bethe-Salpeter wave function inside the interaction range.

Scattering lengths of $I=2$ two pions are computed by both conventional and our methods

with $m_\pi = 0.52 - 0.86$ GeV in the quenched lattice QCD.

The results are compared with each other to confirm consistency.

Furthermore, a half off-shell amplitude is calculated.

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