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$\pi\pi$ and $K\pi$ scattering amplitudes from lattice QCD

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I report on our study of low-lying resonances in $\pi\pi$ and $K\pi$ scattering from lattice QCD. Based on ab-initio multi-hadron spectroscopy and the Lüscher finite-volume method, we have investigated the elastic scattering amplitudes for $\pi\pi$ P-wave, $K\pi$ S-wave and P-wave partial waves. A particular focus of the discussion will be the parametrization of the amplitudes with respect to the identification of resonance parameters. The shown results are obtained for two gauge field ensembles at pion masses 317 MeV and 178 MeV.

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