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Light- and strange-quark mass dependence of the $\rho(770)$ meson revisited

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Recent lattice data on smaller strange quark mass than the physical one allow us to study the strangeness dependence of connected observables as pseudoscalar decay constants and $(I = J = 1)$ $-\pi\pi$ -phase shifts for the first time. Moreover, we perform a global analysis on $\text{Tr}M = c$ and $m_s = k$ trajectories, which guide new predictions on trajectories like $m_u = K$ or $m_s = m_u$. Unitarized one-loop Chiral Perturbation Theory (or the so-called Inverse Amplitude Method), is used to determine the quark mass dependence of these observables. As a result, precise values of the Low-Energy-Constants are given.