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## Long-range interactions in double heavy tetraquarks

$$\bar{Q}\bar{Q}qq$$

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At the large distances compared to the chiral symmetry breaking scale, a four-quark state  $\bar{Q}\bar{Q}qq$  (with  $Q$  as heavy and  $q$  as light quarks) can be treated as two asymptotic mesons interacting via strong residual forces. To analyse the long-range strong force in such a system, we study the interaction between two bottom mesons in the heavy quark limit using chiral effective field theory and dispersion theory. In this contribution, methods to deal with the two-pion-exchange interaction between two static heavy mesons at non-physical pion mass will be discussed. A possible solution, where we use the Khuri-Treiman formalism to properly include the left- and right-hand cuts, will be presented. Finally, a comparison of the obtained results with the corresponding lattice QCD potentials (obtained using the Born-Oppenheimer approximation) will be made.

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