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## Results on meson-meson scattering at large $N_c$

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In this talk, we present results on the dependence of meson-meson scattering observables on number of colors,  $N_c$ . We work in a theory with  $N_f = 4$  degenerate light quark flavors, and run lattice simulations with varying  $N_c = 3 - 6$  and pion mass  $M_\pi \approx 590$  MeV. We focus on three different scattering channels, two of which possess the quantum numbers of some recently-found tetraquarks states at LHC. These include the the scalar  $T_{c\bar{s}0}^{++}(2900)$  state or the vector  $T_{c\bar{s}1}^0(2900)$  particle. Finite-volume energies are extracted using two-particle operators corresponding to either two pions or two vector mesons, complemented by local tetraquark operators. Using Lüscher's formalism, we constrain the  $N_c$  dependence of the infinite-volume scattering phase shift of the studied channels and investigate the possible presence of tetraquark resonances.

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