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# Exploring the ’t Hooft limit of meson observables

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The ‘t Hooft limit of QCD, also referred to as large Nc limit, constitutes a simplification of the theory that preserves most of its non-perturbative properties, including confinement and spontaneous chiral symmetry breaking. It also leads to some definite predictions such as a non-existing Delta I=1/2 rule in the K-> pi pi isospin decay amplitudes. Many phenomenological approaches to hadron physics employ approximations inspired by this limit, even for quantities such as the former, where the large Nc prediction is off. In this talk, I will present our recent lattice results for some relevant observables for light meson physics, such as meson mases and decay constants, nonleptonic kaon decay amplitudes, and scattering amplitudes.

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