Contribution ID : **8** Type : **not specified**

# Dynamical generation of hidden-charm meson states in heavy meson scattering

In this presentation, we explore the dynamical generation of hidden-charm scalar and tensor meson states ($J^PC = 0^{++}, 2^{++}$) in heavy-meson scattering. Our methodology involves solving the off-shell coupled-channel integral equation within a meson-exchange framework. We construct the kernel matrix using an effective Lagrangian that respects both heavy quark symmetry and hidden local symmetry. By applying the matrix inversion method to solve the integral equation, we obtain transition amplitudes for four distinct channels. Our findings reveal a scalar bound state below the D\bar{D} threshold and two cusps near the $D^*\bar{D}^*$ threshold in both scalar and tensor channels. We will discuss in detail the coupled-channel effects contributing to the generation of these states, providing insights into the complex dynamics of heavy-meson interactions and the emergence of exotic meson states. This investigation enhances our understanding of the intricate behavior of heavy mesons and contributes to the broader field of hadron spectroscopy.

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