Theoretical Aspects of Hadron Spectroscopy and Phenomenology

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Study of the X(6900) and evaluation of systematic uncertainties in the IAM

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In this talk we would like to discuss a few aspects developed recently in 2011.00978 and 2010.13709. In the former work we study three approaches to dwell on the nature of the X(6900) from S-matrix techniques without assuming a specific dynamical model. We connect them, as well as with other techniques in the literature, and conclude that the J/psi-J/psi event distribution as measured by the LHCb collaboration is compatible with the X(6900) being a bare or elementary resonance. In the other part of the talk we consider those terms neglected in the Inverse Amplitude Method when unitarizing the NLO Chiral perturbative amplitudes, and bounded the uncertainty that arise from neglecting them when predicting the mass of the lightest resonance with the given quantum numbers. Explicit numbers are provided for the $\no(770)$.

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