## Excited QCD 2017



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## General unquenching properties of two-meson scattering and production amplitudes

Wednesday 10 May 2017 09:00 (30 minutes)

Besides the unitarity and symmetry requirements for a multi-resonance scattering amplitude, several other natural conditions can easily exclude unrealistic proposals. In particular, the behaviour of singularities under the variation of model parameters yield important information. We discuss how resonance poles should move in the complex-energy plane when coupling constants and masses are varied, how resonances above threshold can turn into bound states below threshold and how the light-quark spectrum can be turned into the spectrum of heavy quarks, with one and the same analytic expression for the scattering amplitude. Moreover, it is shown that perturbative approximations usually do not satisfy the natural conditions.

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