

## **Covariant Spectator Theory of heavy-light and heavy mesons and the predictive power of covariant interaction kernels**

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The Covariant Spectator Theory (CST) is used to calculate the mass spectrum and vertex functions of heavy-light and heavy mesons in Minkowski space. The covariant kernel contains Lorentz scalar, pseudoscalar, and vector contributions. The numerical calculations are performed in momentum space, where special care is taken to treat the strong singularities present in the confining kernel. The observed meson spectrum is very well reproduced after fitting a small number of model parameters. Remarkably, a fit to a few pseudoscalar meson states only, which are insensitive to spin-orbit and tensor forces and do not allow to separate the spin-spin from the central interaction, leads to essentially the same model parameters as a more general fit. This demonstrates that the covariance of the chosen interaction kernel is responsible for the very accurate prediction of the spin-dependent quark-antiquark interactions.