

Abstract Submitted
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Heavy-Light Mesons on the Light Front¹ SHUO TANG, YANG LI, PIETER MARIS, JAMES VARY, Iowa State University — We study the heavy-light mesons within basis light-front quantization. The resulting mass spectra of D , D_s , B , and B_s agree reasonably well with experiments. We also predict states which could be measured in the near future. In the light-front formalism, we calculate the light-front wave functions and additional experimental observables, such as parton distribution functions, distribution amplitudes, and decay constants by means of integrations over light-front wave functions. We also provide ratios of decay constants for selected pseudoscalar meson decays (D_s to D and B_s to B) as they may prove to be theoretically more robust and more reliably determined in experiments.

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