Abstract Submitted
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Radiative transitions of heavy quarkonia in basis light-front quantization approach[1] MEIJIAN LI, YANG LI, PIETER MARIS, JAMES VARY, Iowa State University — Quarkonium radiative transitions play a significant role in probing the internal structure of the mesons. We present results for the radiative decay of the charmonium and bottomonium states in the Basis Light-Front Quantization (BLFQ) approach. The light-front wave functions are obtained from the light-front Hamiltonian approach in a holographic basis [1, 2]. With these wave functions we compute transitions between vector and pseudoscalar mesons below the open-flavor thresholds, without adjusting any parameters. Comparisons are made with the experimental measurements as well as results from Lattice QCD. [1] Y. Li, P. Maris, X. Zhao and J. P. Vary, Phys. Lett. B **758**, 118 (2016) [2] Y. Li, P. Maris and J. P. Vary, (in press) arXiv:1704.06968 [hep-ph].

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