

Abstract Submitted
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Form Factors and Generalized Parton Distributions of Heavy Quarkonia in Basis Light Front Quantization¹ LEKHA ADHIKARI, Iowa State Univ, YANG LI, College of William Mary, MEIJIAN LI, PIETER MARIS, JAMES P. VARY, Iowa State Univ — We calculate the electromagnetic (charge, magnetic and quadrupole) form factors and associated quantities, charge radii, magnetic moments, and quadrupole moments of heavy quarkonia (charmonia and bottomonia) using the Basis Light Front Quantization (BLFQ). For this work, we adopt light front wave functions (LFWFs) generated by the holographic QCD confining potential and the one-gluon exchange interaction with a fixed coupling. Using the same LFWFs generated in the BLFQ, we also present the generalized parton distributions (GPDs) for selected quarkonia including those for radially excited mesons such as ψ and Υ' .

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