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## Hadron Spectra, Scattering Properties and Decays from Basis Light Front Quantization

Recent developments using Basis Light Front Quantization (BLFQ) [1-3] will be summarized and applications to meson and baryon systems will be presented. We will present results for spectroscopy, form factors, distribution amplitudes and decays. Starting from the heavy quarkonia systems, charmonia and bottomonia, we proceed towards lighter mesons and then to baryons. The Hamiltonian eigenvalue problem is addressed within a holographic basis and with the adoption of (a) a longitudinal confining interaction; (b) finite quark masses, and (c) the one-gluon exchange interaction with running coupling. Comparisons with Lattice QCD and Dyson-Schwinger results, where available, will be presented. Prospects for applications to more complex multi-quark and multi-gluon systems will be outlined. We will also present an update on applications of the time-dependent BLFQ (tBLFQ) approach to non-perturbative scattering [4].

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### References

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