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Application of a nonperturbative light-front Hamiltonian method to the solution of a gauge theory¹ SOFIA CHABYSHEVA, University of Minnesota-Duluth — As a step toward the development of a nonperturbative method for the solution of quantum chromodynamics, we consider the solution of quantum electrodynamics with a light-front Hamiltonian approach. Details and results of recent calculations will be given, to illustrate the applicability to a gauge theory. As a benchmark, we consider the anomalous moment of the electron in a Fock basis that includes up to two virtual photons.

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