In most simulations of nonrelativistic nuclear systems, the wave functions found solving the many-body Schrödinger equations describe the quantum-mechanical amplitudes of the nucleonic degrees of freedom. In those simulations, the pionic contributions are encoded in nuclear potentials and electroweak currents, and they determine the low-momentum behavior. Recently we presented a novel quantum Monte Carlo formalism in which both relativistic pions and non-relativistic nucleons are explicitly included in the quantum mechanical states of the system [1]. I will present one- and two-nucleon results, and show that the method can be readily applied to light-nuclei.