Abstract Submitted
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High-precision spectroscopy in neutral beryllium-9[1] ERYN COOK, ALISHA VIRA, EMMA LIVERNOIS, CARSON PATTERSON, WILL WILLIAMS, Smith College — We report on spectroscopic measurement progress for a variety of states in neutral beryllium-9. Measurements include the absolute transition frequencies and hyperfine constants for the 2s2p 1P1, 2s2p 3P1, and 2s3d 1D2 states. Our experimental result for the absolute frequency from the ground state to the 2s2p 1P1 state is in agreement with recent theoretical predictions that include the effects of quantum electrodynamics[1]. We also present the first hyperfine spectra for the 2s2p 1P1 and the 2s3d 1D2 states. [1]Puchalski et al. PRA 87, 030502(R) (2013)

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