

Abstract Submitted
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Anisotropy Dependent Circular Polarization Spectra in Cs $6p^2P_{3/2}$ level¹ BURCIN BAYRAM, RAMESH MARHATTA, JACOB HINKLE, PRAKASH KOIRALA, Physics Department, Miami University, Oxford, Ohio 45056 — Experimental investigation of the cesium $6s^2S_{1/2} \rightarrow 10s^2S_{1/2}$ two-photon circular polarization spectra has been made. The time evolution of anisotropies, namely orientation and alignment state multipoles, in the excited state and their effects to the circular polarization spectra have been shown. Collisions between the excited level cesium atoms and the ground level argon atoms in the gas phase yielded anisotropy dependent depolarization cross section to be extracted from the measured circular polarization degree. Experimental details and the results will be presented.

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