

Abstract Submitted  
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**Hyperfine Structure Measurement in the  $8p^2P_{3/2}$  Level of Cesium by Quantum Beat Spectroscopy**<sup>1</sup> BURCIN BAYRAM, OLEG POPOV, STEPHEN KELLY, ANDREW SALSMAN, Miami University — Using the delayed-detection method in conjunction with pump-stimulated emission probe excitation, we have measured atomic polarization quantum beats in the  $8p^2P_{3/2}$  level of atomic cesium. According to the observed evolution of hyperfine structure dependent parameters, e.g. alignment and atomic polarization, by delaying the arrival time of the probe laser, the magnetic dipole A and electric quadrupole B coefficients are obtained. We will present our unique method, applied the first time to the  $8p^2P_{3/2}$  level of atomic cesium, and the results which are in good agreement with the previous determination within the error limits.

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