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Pump/Probe Angular Dependence of Hanle Electromagnetically Induced Transparency¹ RICHARD JACKSON, KALEB CAMPBELL, Miami University, MICHAEL CRESCIMANNO, Youngstown State University, SAMIR BALI, Miami University — We investigate the dependence of Hanle Electromagnetically Induced Transparency (EIT) on angular separation between pump and probe field propagation directions in room-temperature Rb vapor. We observe the FWHM of the probe transmission spectrum and the amplitude of the EIT signal while varying the angular separation from 0 to 1 milliradian. Following the work of M. Shuker, O. Firstenberg, R. Pugatch, A. Ben-Kish, A. Ron, and N. Davidson, Phys. Rev. A 76, 023813 (2007), we examine potential applications in information storage and retrieval.

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> Richard Jackson Miami University

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