

Abstract Submitted  
for the OSF06 Meeting of  
The American Physical Society

**Observation of Electromagnetically Induced Transparency (EIT) in an Atomic Vapor using the Hanle Effect** YUHONG ZHANG, SAM BISH, BENJAMIN AGYARE, SAMIR BALI, Miami University — This is a progress report on our ongoing investigation of Electromagnetically Induced Transparency using the Hanle effect in Rubidium (Rb) atomic vapor. The Hanle effect results in a sharp coherent feature in the absorption of the incident beam at zero magnetic field. We have observed this Hanle peak with good signal-to-noise ratio in the Rb<sup>87</sup>  $F = 1 \rightarrow F'$  transitions. Hanle features in these particular transitions of Rb have never been previously observed. We describe further improvements made to our apparatus in order to further enhance the quality of the Hanle peak. Our goal is to use the Hanle effect as a sensitive measure of radiation trapping. We gratefully acknowledge funding from Research Corporation and the Petroleum Research Fund. We also thank Dr. Michael Crescimanno at Youngstown State University for loaning us an atomic clock magnetic shield.

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Date submitted: 25 Sep 2006

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