

Abstract Submitted  
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**Multi-photon EIT** TOOMAS LAARITS, BRYAN O’GORMAN, Harvard University/Physics Department, MICHAEL CRESCIMANNO, Youngstown State University/Physics Department — We describe and solve a quantum optics models for multiphoton interrogation of an electromagnetically induced transparency (EIT) resonance. Multiphoton EIT, like its well studied Lambda-system EIT progenitor, is a generalization of the N-resonance process recently studied for atomic time keeping. The solution of these models allows a preliminary determination of this processes utility as the basis of a frequency standard.

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