EIT intensity noise spectroscopy power-broadening and level structure

CHARLES SNIDER, MICHAEL CRESCIMANNO, Dept. of Physics, Youngstown State U., SHANNON OLEYAR, Dept. of Physics, Lawrence U. — One particularly interesting (and potentially technologically useful) characteristic of EIT coherence as viewed through intensity noise spectroscopy is its power-broadening resistant features. We detail a connection between the power broadening behavior and the underlying level structure by solving a more realistic quantum optics scenario modeled on recent experiments.

Michael Crescimanno
Dept. of Physics, Youngstown State U.

Date submitted: 10 May 2011

Electronic form version 1.4