

Abstract Submitted  
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**Quantum coherence effects in a six-level atomic system driven by three lasers** JIANBING QI, Penn State University at Berks — We study the fluorescence spectrum and the absorption of the probe laser in a six-level atomic system coupled by three lasers. A variety of interesting fluorescence spectral features can be attained by controlling the amplitude and detuning of the lasers. Quantum interference, such as the extremely narrow spectral lineshape, and fluorescence quenching, is observed. The absorption spectrum of the probe laser shows electromagnetically induced transparency (EIT), which can be controlled by two coupling lasers. The EIT can be manipulated from a single transparent window to double transparent windows at different probe frequencies.

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