

S1-2.2

Quantum Interferences with Equidistant Three-level Quantum Wells

V. Ceban and M. A. Macovei

Institute of Applied Physics, Chişinau, Moldova

A three-level ladder-type equidistant quantum-well with perpendicular transition dipoles, tuned in resonance with an optical cavity have been investigated in the good cavity limit. Under the laser pumping, a quantum interference phenomena occurs. This phenomenon is controlled via the laser intensities and phases and may be tuned in order to destructively interfere. The cavity mean photon number vanishes under these conditions.