Applied Mathematics Seminar
INSCC 110, 3:30pm Monday
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On the question of optical properties of micro/nanostructures

by

Arcady Chipouline

Department of Physics, University of Utah

Abstract

Recent technology achievements allow us to create programmable structures with resolution as small as several tens of nanometers. Different phenomena known previously from solid state physics or in microwave experiments can now be experimentally investigated in optical wavelength region. Among them are 3-D and 2-D Photonic Band Gap (PBG) structures, PBG based lasers and waveguides, microcavities and coupled microcavities. Experimental investigation of these structures (made of both optically active or passive materials) is now of great interest not only due to their potential applications, but in connection with fundamental physical problems (such as quantum scattering, order-chaos transition, random lasing). We will review recent experiments that are carried out or planned in near future in the Laser Institute.