

Colloquium Notice

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Controlling light with plasmonic and photonic crystals

The research fields of plasmonic crystals and photonic crystals have been attracting increased interest due to the fairly recent observations of new and unexpected optical characteristics in subwavelength size-scale periodic structures. Structures such as two-dimensional hole arrays in metal films and optical transmission gratings have been researched in spectral regions from the ultraviolet to microwave. In this talk, the ability to control light with these and related structures will be discussed. Starting with a discussion of anomalously large optical transmission in transmission gratings, the surface plasmons and other optical modes in these structures are identified and their roles in producing several interesting optical characteristics are discussed. The phenomena of anomalously large optical transmission, light circulation, light weaving and light trapping in these structures and their applications to optoelectronic and photonic devices will be discussed.

Monday

May 5, 2008

Starts at 12:15 PM

Coffee at 12:00 PM

Physics Conference Room, SB B326