

Sonderseminar des Centrums für Angewandte Photonik – CAP

Mittwoch, 29. Juni 2005, 12.15 Uhr, Raum P 812

Mark I. Stockman

Department of Physics and Astronomy, Georgia State University, Atlanta, Georgia

„ Coherent, Nonlinear, and Active Nanoplasmonics “

Abstract: Nanoplasmonic phenomena are based on the resonant excitation of surface plasmons leading to the highly enhanced local optical fields on nanoscale. These fields cause a multitude of enhanced optical effects that have many existing and prospective applications. The following topics will be considered in the talk. (i) Adiabatic transformation of the external laser radiation and its delivery to the nanoscale as the localized surface plasmons. (ii) Efficient nanolens of nanospheres. (iii) Coherent control of the intensity and spatial distribution of local optical fields on the nanoscale. (iv) Generation of the local optical fields directly on the nanoscale by Surface Plasmon Amplification by Stimulated Emission of Radiation (SPASER). We will discuss theory and related experiments, and perspective applications.

Ansprechpartner: Prof. T. Dekorsy (Tel. 3820)
Prof. A. Leitenstorfer (Tel: 3818)

