

Physics Seminar

Friday, 3:30 pm Feb. 11, 2011

Colloidal gold nanoparticles - Optical properties and their self-assembly in liquid crystals

Julian Evans

Optical metamaterials potentially offer sub-diffraction limited optical imaging, negative refraction, and invisibility cloaks. Metal nanoparticles offer extraordinary enhancement of local electric fields through plasmon resonance, which makes them ideal candidates for meta-material applications. Liquid crystals allow nanoparticles to self-assemble into microscopically and macroscopically coherent domains providing potential for cheap device-scale metamaterials.

(Julian Evans is a graduate student at CU Boulder for his PhD degree in the Liquid Crystal Research Lab.)

Location: Ross 0220 (Ground level of Ross Hall)

(Refreshments will be served at 3:20pm.)

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