

Seminar

Broadband omnidirectional metamaterials

Venu Gopal Achanta

Tata Institute of Fundamental Research, Mumbai

Metamaterials are, in general, resonant structures designed for specific applications. To overcome the limitations arising from discrete resonances that can be excited at specific launch angles, it would be advantageous if broadband dispersionless metamaterials are realized. In this talk, I will present plasmonic and all-dielectric metamaterials in the form of quasiperiodic arrays of air holes in metal films or dielectric substrates. Broadband, dispersionless and polarization independent response of these structures is shown in extra ordinary transmission, second harmonic generation, suppression of reflection, Goos-Hanchen shift of short laser pulse among others.

Thursday, Jul 7th 2016

11:30 AM (Tea/Coffee at 11:15 AM)

Seminar Hall, TCIS