

BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA



INSTITUTO DE FÍSICA
"Luis Rivera Terrazas"



SEMINARIO EXTRAORDINARIO
"DR. JESUS REYES CORONA"

"Impact of spatial dispersion and Landau damping on photonics of dielectric-metal superlattices"

Dr. Denis Iakushev
Investigador posdoctoral - ICUAP,
Benemérita Universidad Autónoma de Puebla.

The propagation of electromagnetic waves through a one-dimensional periodic array of bilayers with metal inclusions is discussed. The spatial dispersion inside metal leads to the emergence of the fundamental collisionless Landau damping. It cannot be neglected not only when prevailing over ordinary collision damping but even when these two kinds of the electromagnetic absorption are of the same order. The spatial dispersion and Landau damping always exist and considerably alter optic spectrum and photonic transmission of the array within the THz and near-infrared frequency range.

Auditorio-IFUAP
Miércoles 17 de Junio de 2015
13:00 Hrs.