NEW YORK CITY COLLEGE OF TECHNOLOGY
Physics Department
Center for Theoretical Physics

Negative refractive index for graphene and surface Plasmon instability for hybrid structures

Presented by:
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Namm, Room 823

Abstract

Femtosecond and subfemtosecond time scales typically rule electron dynamics at metal surfaces. Recent advances in experimental techniques allow the experimental study of such dynamics. In this talk we shall analyze electron dynamics at surfaces and nanostructures with emphasis on screening times, spin dependence of charge transfer of adsorbates and smaller system sizes. We will discuss the effect of energy gaps on possible "Veselago lenses" for completely flat graphene sheets. We will also discuss how Plasmon instabilities may be exploited for tunable radiation generation which may be employed in detectors.

Light refreshments will be served.