

Colloquium Notice

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Pseudo-relativistic quantum physics and graphene

Femtosecond and subfemtosecond time scales typically rule electron dynamics at conductor surfaces. Recent advances in experimental techniques allow the experimental study of such dynamics. In this talk we shall analyze electron dynamics at the surfaces of nanostructures with emphasis on screening, chirality and spin dependence of charge transfer, plasmonics, dipolar excitons in double layer graphene and the associated superfluidity and Bose-Einstein condensation. We will discuss the effect of energy gaps on possible "Veselago lenses" for completely flat grapheme sheets. We will also discuss how plasmon instabilities may be exploited for tunable radiation generation which may be employed in detectors.

Monday
November 14, 2022
Starts at 12:15 PM
Coffee at 12:00 PM

B326

This talk is accessible via [Zoom](#) or use
meeting ID 829 2687 2594 and **passcode 866995** to join