

Abstract Submitted
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Static and dynamical response of graphene TOBIAS STAUBER, GUILLERMO GOMEZ SANTOS, Universidad Autonoma de Madrid — We discuss the static and dynamical response of graphene. First, we show that including the full hexagonal lattice leads to anisotropic Friedel oscillations and paramagnetic orbital susceptibility around the neutrality point [1]. We then apply the dynamical current-current correlation function to discuss graphene's fluorescence quenching including also transverse decay channels and full retardation [2]. We finally discuss the optical properties of double layer graphene.

[1] G. Gómez-Santos and T. Stauber, Phys. Rev. Lett. 106, 045504 (2011).

[2] G. Gómez-Santos and T. Stauber, Phys. Rev. B 84, 165438 (2011).

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