

Abstract Submitted  
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**Magneto-optical spectra of ABA trilayer graphene: interplay between monolayer and bilayer signatures**<sup>1</sup> YEN-HUNG HO, WU-PEI SU, Department of Physics and Texas Center for Superconductivity, University of Houston, Texas, MING-FA LIN, Department of Physics, National Cheng Kung University, Taiwan — We utilize a generalized tight-binding model to study the Landau level spectra of ABA trilayer graphene. The spatially resolved Landau wave functions enable the characterization of Landau levels and the calculation of magneto-optical properties. The spectra consist of monolayer-like and bilayer-like features, in which the inter-valley symmetry is lifted, especially the levels close to zero energy. Applying a bias voltage effectively increases the splitting, and furthermore, triggers the optical transitions between monolayer-like and bilayer-like Landau states. The calculated results can be further verified by optical measurements, and this numerical method can be applied to other layered materials, such as Molybdenum disulfide.

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