

Abstract Submitted
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Magnetic Properties of Graphene Superlattices SI WU, University of Waterloo, MATTHEW KILLI, ARUN PARAMEKANTI, University of Toronto — We studied graphene superlattices (SL) in the presence of magnetic fields. We found magnetic properties of single layer and bilayer graphene SLs in a weak magnetic field are strongly determined by emergent Dirac physics. Moreover, the spatial anisotropy of diagonal conductivities can be reversed when magnetic field is tuned from weak to intermediate strength. In a strong magnetic field, all anisotropies disappear and results from pristine graphene are restored.

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