

Abstract Submitted
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Electric and Magnetic Field Induced Insulating States in High Quality Bilayer Graphene pnp Junctions LEI JING, JAIRO VELASCO, PHILIP KRATZ, Univ. of California, Riverside, GANG LIU, UCLA, WENZHONG BAO, MARC BOCKRAT, CHUN NING LAU, Univ. of California, Riverside — Band gap opening in bilayer graphene has generated significant interest in both technological application and fundamental research. By applying external electric and magnetic field, we observe an insulating state in our dual-gated bilayer graphene device. In addition, we also observe Quantum Hall plateaus with fractional values of e^2/h at large magnetic field, which arises from edge state equilibration at the interface of differentially doped regions, in agreement with theoretical predictions.

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