

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Sorting Category: 12.8 (E)

Quantum **Transport**
in Double-gated Trilayer Graphene *pn*p Junctions YONGJIN
LEE, JAIRO VELASCO JR., LEI JING, WENZHONG BAO, DAVID
TRAN, MARC BOCKRATH, CHUN NING (JEANIE) LAU, Depart-
ment of Physics and Astronomy, University of California, Riverside —
Using trilayer graphene *pn*p junctions with suspended top gates, we
perform transport measurements. At a magnetic field $B=0$, by an ap-
plied perpendicular electric field, the conductance is increased that it is
suggestive of a semi-metallic band overlap. At $B=8\text{T}$ we observe quan-
tum Hall conductance with fractional values, which can be explained
equilibration of edge state between differentially-doped regions, and the
presence of an insulating state at filling factor $\nu=0$.

Prefer Oral Session

Prefer Poster Session

Department of Physics and Astronomy, University of California, Riverside

Yongjin Lee

yongjin.lee@email.ucr.edu

Date submitted: 26 Jan 2012

Electronic form version 1.4