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Interferences and Fabry-Perot Oscillations in ABA Trilayer Graphene LEONARDO CRISTIANO CAMPOS, KAWIN SURAKITBOVORN, Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02139 USA, KENJI WATANABE, TAKASHI TANIGUCHI, National Institute for Materials Science, Namiki 1-1, Tsukuba, Ibaraki 305-0044, Japan, PABLO JARILLO-HERRERO, Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02139 USA, DEPARTMENT OF PHYSICS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY/NATIONAL INSTITUTE FOR MATERIALS SCIENCE TEAM — ABA trilayer graphene (TLG) is a 2D system with multiple sub-bands which can be divided into one monolayer graphene-like sub-band and one bilayer graphene-like sub-band, therefore comprising a system wherein massive and massless bands coexist. Here, we study electronic transmission in the ballistic regime through a 70nm-wide tunable electrostatic potential barrier on exfoliated ABA trilayer graphene encapsulated by hexagonal Boron Nitride. We report Fabry-Perot oscillations of the conductance caused by multiple reflections of the charges in the potential barrier, and we also present a study of their magneto dependence.

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