

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Effect of disorder on electron tunneling in graphene layers through potential barriers VRINDA THAREJA, MANISH SHARMA, SANKALPA GHOSH, Indian Institute of Technology Delhi — Electrons at the fermi level in Graphene monolayer behave like massless Dirac fermions. Using a coherent potential approximation, we study the tunneling of such electrons through a double barrier potential in presence of disorder. We subsequently extend this study in the case of periodic lattice potentials. Our approach involves using the Green's function calculation and is particularly amenable to studying the effect of disorder, impurities and defects on electron propagation through Graphene.

Manish Sharma
Indian Institute of Technology Delhi

Date submitted: 21 Nov 2008

Electronic form version 1.4