

Abstract Submitted  
for the MAR17 Meeting of  
The American Physical Society

**Resonant scattering in graphene in a strong magnetic field**  
JEONGSU LEE, DENIS KOCHAN, JAROSLAV FABIAN, University of Regensburg — Spin relaxation in graphene is strongly affected by the resonant scattering mechanism due to magnetic impurities forming spin hot spots even with little contribution to the momentum scattering process. Recent experiments demonstrate that these magnetic moments can be induced either by vacancies or adsorbents such as hydrogen atoms. Meanwhile, unlike in the non-relativistic two dimensional electron gas, a strong magnetic field in graphene induces a Landau level overlapping with the resonance peak in the density of states near the Dirac point. We study the interplay between resonance scattering and strong magnetic fields in the presence of magnetic moments and local spin-orbit coupling to elucidate the spin dependent transport characteristics.

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Date submitted: 12 Nov 2016

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