

Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

The Unified Theory of Angular Magnetic Oscillations in Q1D Conductors SI WU, ANDREI LEBED, University of Arizona — We develop a unification theory of the angular magnetoresistance oscillations, experimentally observed in quasi-low-dimensional organic conductors. We demonstrate that electron trajectories become extended and interlayer resistance show minima at certain commensurate directions of a magnetic field. We compare our theory with the existing experiments on the Lee-Naughton-Lebed oscillations and the Lebed Magic Angel effects and obtain good qualitative and quantitative agreement between the theory and experimental data. Our work is supported by the NSF through the grant DMR-0705986.

Si Wu
University of Arizona

Date submitted: 19 Nov 2009

Electronic form version 1.4