Abstract Submitted
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Angular Dependent Magnetoresistance Measurements of $(Per)_2Au(mnt)_2$ Under Pressure[1] D. GRAF, E.S. CHOI, J.S. BROOKS, NHMFL/FSU, Tallahassee, FL, M. ALMEIDA, Instituto Tecnolgico e Nuclear/CFMCUL, Sacavm, Portugal — The quasi-one-dimensional organic conductor $(Per)_2Au(mnt)_2$ has a charge density wave (CDW) ground state when cooled below a transition temperature of $T_{CDW} \sim 12$ K under ambient pressure. The CDW state is largely suppressed by applying a pressure of ~ 6 kbar, as shown by a dramatic increase in low temperature conductivity where the behavior remains slightly activated, providing evidence of a mixed CDW-metal state. Oscillations under pressure are observed in the magnetoresistance (MR) which agree well with band structure estimates of the Fermi surface and are explained by Stark quantum interference. The angular dependence of the MR oscillations has been studied using the continuous rotation of a pressure cell in constant magnetic fields, aligned with the crystallographic planes of the sample. The results will be discussed within the context of known MR angular effects (i.e. Lebed or Danner-Kang-Chaikin oscillations) as well as the inhomogenous CDW-metal state which may exist in this pressure range.

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