Competing electronic orders within a multi-band reconstructed Fermi surface in the layered cuprate superconductor \( \text{Pr}_2 \text{CuO}_4 \) NICHOLAS BREZNAY, IAN HAYES, SYLVIA LEWIN, ALEX FRANO, TONI HELM, JAMES ANALYTIS, University of California, Berkeley, YOSHIHARU KROCKENBERGER, HIDEKI YAMAMOTO, NTT Basic Research Labs, ZENGWEI ZHU, KIMBERLY MODIC, ROSS MCDONALD, Los Alamos National Lab — The reconciliation of quantum oscillation, ARPES, and resonant x-ray scattering experiments provides a unique opportunity to understand competing electronic orders in the cuprates. In particular, the Fermi surface (FS) evolution with carrier doping, and the relevance of competing electronic orders (such as charge order), remain topics of active debate. In \( T' \) structure, electron-doped compounds such as \( \text{Pr}_2 \text{CuO}_4 \), recent quantum oscillation measurements show evidence for a reconstructed FS near maximal \( T_c \). However, discrepancies with ARPES measurements and the \( (\pi, \pi) \) reconstruction scenario - such as the absence of an electron pocket - still remain. In this talk I will describe recent high-field transport and resonant x-ray scattering studies on superconducting \( \text{Pr}_2 \text{CuO}_4 \). We find evidence for weak, nearly temperature-independent charge order, along with a high-field Hall effect that indicates a reconstructed, multi-band Fermi surface. This developing picture illustrates a crucial link between non-superconducting electronic orders in the electron-doped cuprates.