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Charge order and the pseudogap in the underdoped cuprates: a quantum oscillation study YU-TE HSU, MATE HARTSTEIN, Cavendish Laboratory, University of Cambridge, NEIL HARRISON, MUN CHAN, KIMBERLY MODIC, Los Alamos National Laboratory, JUAN PORRAS, TOSHINAO LOEW, MATHIEU LE TACON, BERNHARD KEIMER, Max Planck Institute for Solid State Research, SUCHITRA SEBASTIAN, Cavendish Laboratory, University of Cambridge — I will present quantum oscillation results on the underdoped copper-oxide superconductors to address the question of the interplay of the charge ordered ground state with the pseudogap. Specifically we experimentally distinguish between the two cases where charge order reconstructs a large paramagnetic Fermi surface predicted by band structure, or where charge order reconstructs a truncated Fermi surface where the density of states is restricted to the nodal region, as observed in the pseudogap state.

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