

Abstract Submitted  
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**Electrostatic Tuning of the Coulomb Interaction in Single-Layer Graphene** NICHOLAS DALE, University of California, Berkeley, CLAUDIA FATUZZO, Lawrence Berkeley National Lab, RYO MORI, IQBAL BAKTI UTAMA, University of California, Berkeley, JONATHAN DENLINGER, Lawrence Berkeley National Lab, CONRAD STANSBURY, SIHAN ZHAO, KYUNGHOOON LEE, University of California, Berkeley, TAKASHI TANIGUCHI, KENJI WATANABE, National Institute for Materials Science, FENG WANG, ALESSANDRA LANZARA, University of California, Berkeley — The Landau-Fermi Liquid Theory maps an interacting liquid of electrons to a non-interacting gas of quasiparticles. This picture breaks down in Graphene, because the bare Coulomb interaction is preserved near the charge neutrality point. In this talk, I will discuss recent in-operando angle-resolved photoemission studies on single layer graphene where we directly visualize modifications of its electronic band structure upon tuning the Fermi Energy.

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