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Corbino Measurement of Graphene in Quantum Hall States YUE ZHAO, PAUL CADDEN-ZIMANSKY, PHILIP KIM — The origin and the nature of zero energy quantum Hall (QH) state at the charge neutrality point of graphene are still under debate. In conventional Hall bar geometry of graphene device, direct access of bulk conduction in QH regime has been complicated due to the presence of edge state channel in the device. We employ Corbino device geometry in graphene and measure the bulk conduction between inner and outer electrode without edge state channel connection. We observe $\nu = 0$ state is independent of in-plane magnetic field, indicating that its origin is not of spin-related.

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