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Edge Contact to 2D materials BO WEN, MATTHEW KOCI, CORY DEAN, City College of New York, KENJI WATANABE COLLABORATION[1], TAKASHI TANIGUCHI COLLABORATION[2] — Electrically interfacing 3D metal electrodes to atomically thin 2D materials presents a fundamental technical challenge. Recently we demonstrated that metalizing along the 1D edge of graphene enables a new device topology with remarkably low contact resistance. Here we expand the capability of this edge-contact technique by integrating leads with complex properties, such as ferromagnetic and superconducting metals. Implications for realizing novel electronic behavior in 2D layered materials will be discussed. [1] L. Wang, *et al.,* One-Dimensional Electrical Contact to a Two-Dimensional Material, *Science*, **342** (6158), 614-617. (2013)

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