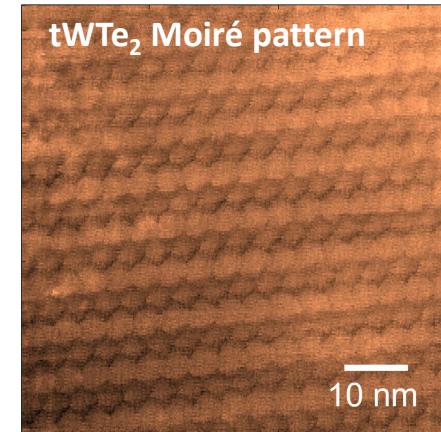
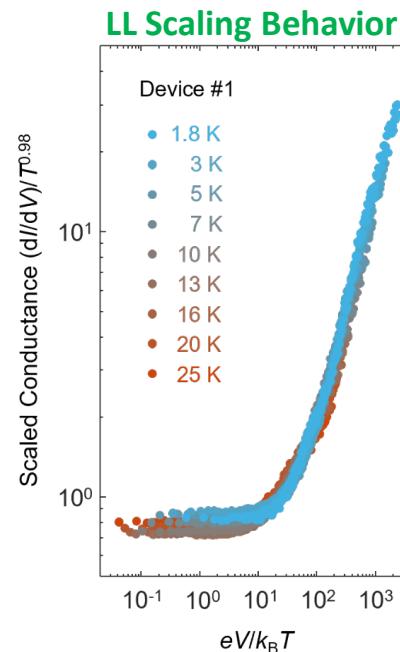
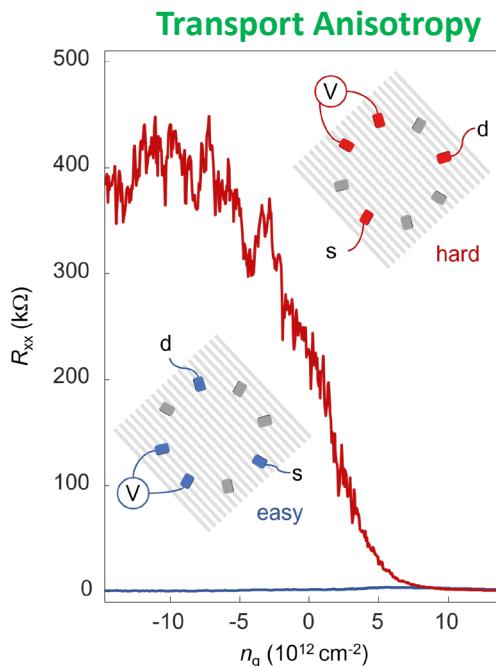


# Materials Research Science and Engineering Centers

## Twisted bilayer WTe<sub>2</sub>: a Moiré Luttinger Liquid in Two-Dimensions

- Exceptionally large transport anisotropy & power law scaling conductance found for hole-doped tWTe<sub>2</sub> at low temperatures
- A moiré-induced 2D array of 1D Luttinger liquids
- Potentially related to various coupled wire models, novel quantum Hall effects and spin-charge separation



P. Wang\*, G. Yu\*, Y. H. Kwan\*, Y. Jia, S. Lei, S. Klemenz, F. A. Cevallos, R. Singha, T. Devakul, K. Watanabe, T. Taniguchi, S. L. Sondhi, R. J. Cava, L. M. Schoop, S. A. Parameswaran, and S. Wu, “One-Dimensional Luttinger Liquids in a Two-Dimensional Moiré Lattice,” arXiv:2109.04637, to be accepted to *Nature* (2022)



Princeton Center for Complex Materials  
MRSEC DMR-2011750

