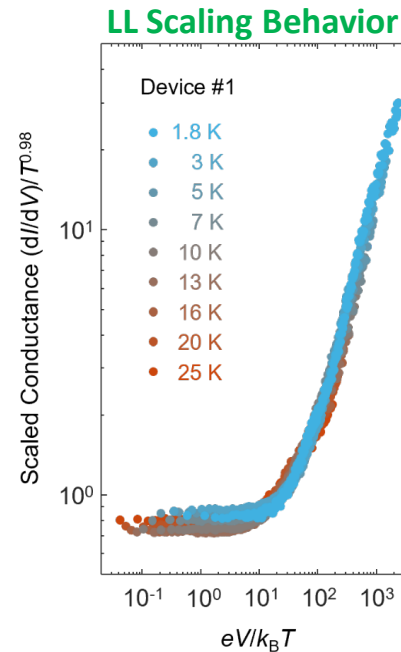
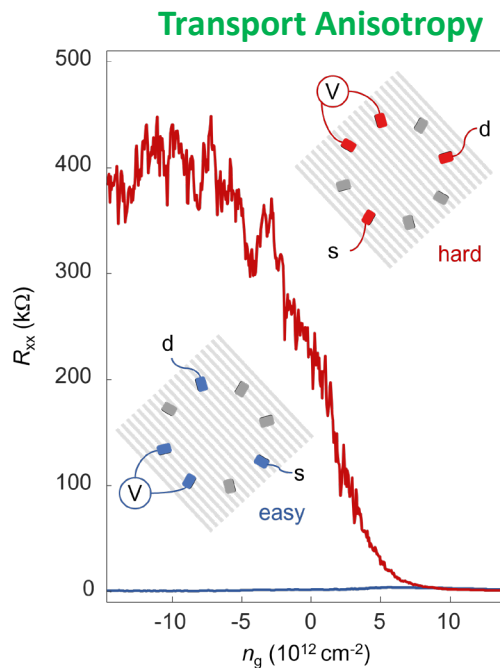
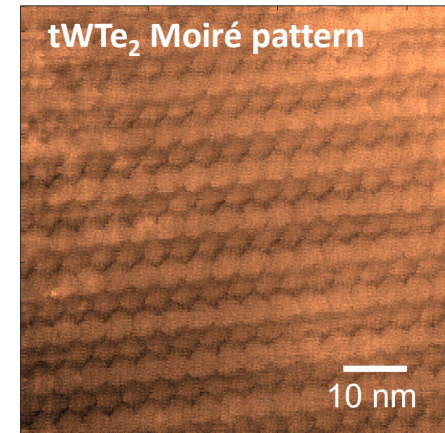


# Materials Research Science and Engineering Centers

## Twisted bilayer $WTe_2$ : a Moiré Luttinger Liquid in Two-Dimensions

- Exceptionally large transport anisotropy & power law scaling conductance found for hole-doped  $tWTe_2$  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," *Nature* **605**, 57-62 (2022)