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Title: Scotch Tape Engineering for Superconductor/Graphene Heterostructures

Abstract: The world of 2D materials has been very exciting since the discovery of graphene and all its novel properties. Now, many classes of 2D materials have emerged - insulators, semiconductors, metals, semi-metals, topological insulators, superconductors, topological superconductors and the list goes on. Nonetheless, the way to work with them in the lab has evolved in a more “arts and crafts“ inspired way. I will share techniques to fabricate and measure high-temperature superconductor/graphene junctions which have given us an opportunity to study Andreev reflection related interference. Further understanding of these devices can lead us closer to high-temperature graphene Josephson junctions which could sustain supercurrents with unconventional phase.