

Abstract Submitted
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mk-STM study of $\text{Cu}_{0.2}\text{Bi}_2\text{Se}_3$ with W and Nb Tips RAMI DANA, WAN-TING LIAO, University of Maryland, IRENEUSZ MIOTKOWSKI, YONG P. CHEN, Purdue University, MICHAEL DREYER, University of Maryland — The Cu intercalated Bi_2Se_3 is predicted to be a time-reversal invariant topological superconductor with Majorana bound state in the vortex core. The samples are characterized by intrinsic inhomogeneity and disorder. Using mk-STM, a variety of high resolution superconducting gaps and sub-gap structures were observed. Our data from SIN and SIS junctions, using W and Nb tips on $\text{Cu}_{0.2}\text{Bi}_2\text{Se}_3$ and while applying of a magnetic field will be discussed in details.

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