Superconductivity in a topological Insulator doped with Pd and H. aInstituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México. A. Postal 70-360. México, D.F. 04510 MÉXICO. aPaolaArevalo aRobertoEscudero

The topological Insulator Bi<sub>2</sub>Te<sub>3</sub> was doped with different amounts of high purity Pd. Superconductivity was observed with a transition temperaturea about 4 K. After injecting Hydrogen, we observed an addition increment of the amount of diamagnetic phase. In this presentation we will show our experimental findings and we will comment about the possible superconducting pairing mechanisms.