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Majorana Zero Modes in Semiconductor Nanowires in Contact with Higher-Tc Superconductors YOUNGHYUN KIM, JENNIFER CANO, UCSB, CHETAN NAYAK, Station Q, UCSB — We present the prospects for stabilizing Majorana zero modes in semiconductor nanowires that are proximity-coupled to higher-temperature superconductors. We begin with the case of iron pnictides which, though they are *s*-wave superconductors, are believed to have superconducting gaps that change sign. We then consider the case of cuprate superconductors. We show that a nanowire on a step-like surface, especially in an orthorhombic material such as YBCO, can support Majorana zero modes at an elevated temperature.

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