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**Anderson Chern Insulators** JAMES JUN HE, TONG ZHOU, Hong Kong Univ of Sci Tech, Z. C. GU, Perimeter Institute, K. T. LAW, Hong Kong Univ of Sci Tech — When a magnetic field is applied to a quantum spin Hall insulator (QSHI) without inversion symmetry, the edge states become gapful due to the breaking of time reversal symmetry (TRS) and the QSHI becomes a trivial spin Hall insulator (SHI) whose Chern number is  $N = 0$ . In this work we show that disorder can drive such a SHI to a Chern insulator (CI) with  $N = 1$  which supports a gapless chiral edge state. This CI exists in a finite range of disorder strength. Interestingly, the edge state is protected by the bulk mobility gap instead of an energy gap. For this reason, the new phase is called an Anderson Chern insulator (ACI).

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