

SUPPLEMENTARY INFORMATION

Weyl cones revealed by the anomalous Nernst effect in MnBi_4Te_7

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The Figure S1 displays the raw data of the transverse thermoelectric signal as a function of the external magnetic field of a MnBi_4Te_7 single crystal across the antiferromagnetic transition.

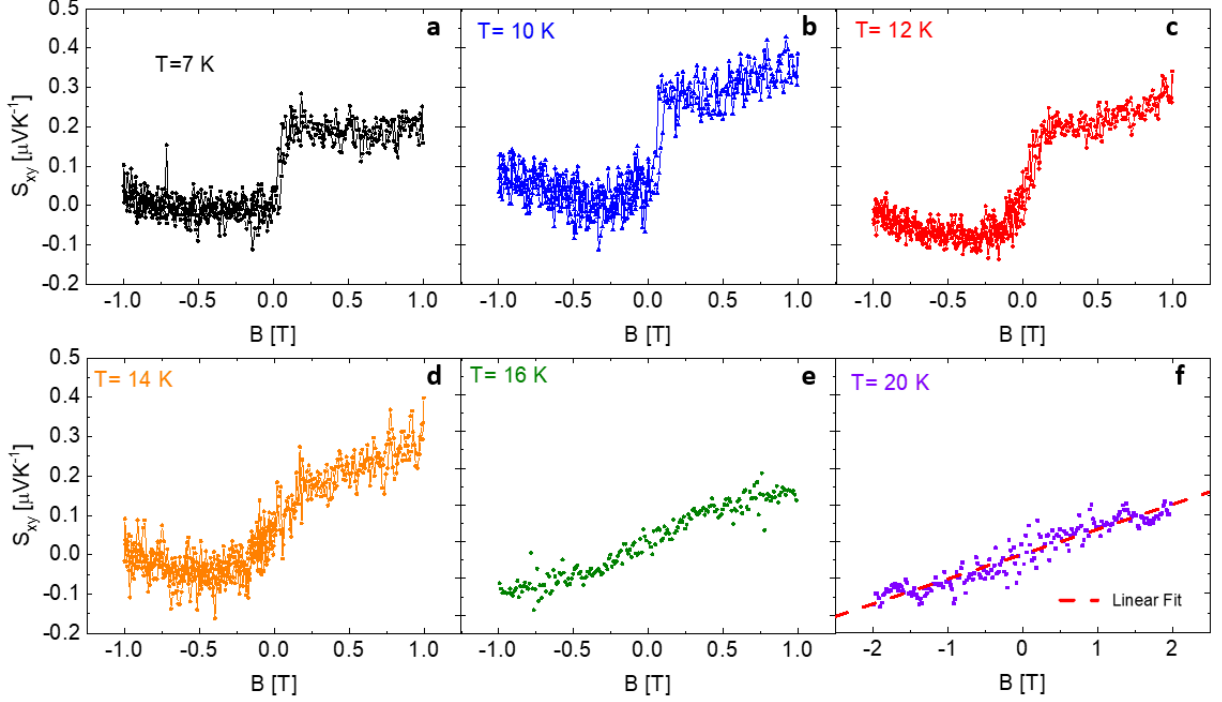


Figure S 1. Raw data of the Nernst coefficient of a MnBi_4Te_7 single crystal a-e) The Nernst transverse thermoelectric signal as a function of temperature and magnetic field for $7 \text{ K} < T < 16 \text{ K}$ and $-1 \text{ T} < B < 1 \text{ T}$. f) The Nernst coefficient at $T = 20 \text{ K}$, considering $-2 \text{ T} < B < 2 \text{ T}$ and linear fit.

The Figure S2 displays the temperature dependence of the Seebeck coefficient S_{xx} of a MnBi_4Te_7 single crystal. A magnitude of $20 \mu\text{V}/\text{K}$ at room temperature is compatible with the value reported in literature for Mn124. Moreover, the absolute value of the Seebeck coefficient decreases monotonically reducing temperature and the negative sign indicates again electron-type bulk charge carriers. For $T < 50 \text{ K}$, S undergoes an upturn that could be attributed to the presence of a phonon-drag contribution, but magnetic phase transitions cannot be revealed.

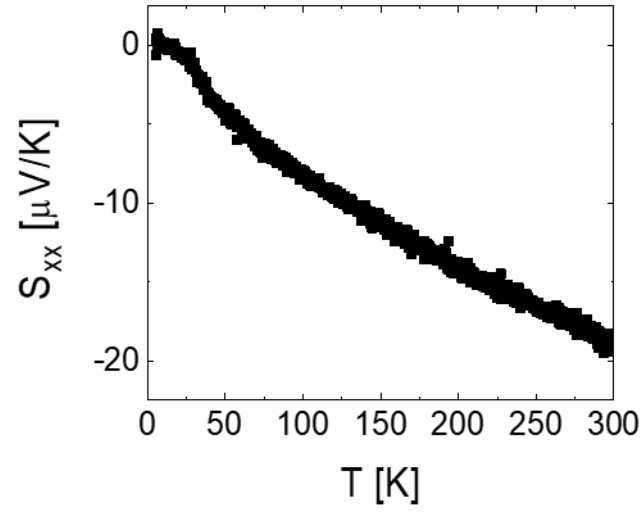


Figure S 2. Temperature dependence of the Seebeck coefficient of a MnBi_4Te_7 single crystal.