

Spin reorientation in ferromagnetic type-II Weyl Fe₃Sn₂.

Tuesday, 29 October 2019 15:00 (30 minutes)

Fe₃Sn₂ is a predicted type-II Weyl semimetal which orders ferromagnetically below TC= 646 K. It undergoes a spin reorientation transition (SRT) between 300K-100 K which together with recently shown coupling between its easy axis and the band structure paves the way of external control of its bulk properties. By probing anisotropic magnetoresistance, and bulk magnetization, we understand its domain structure together with evolution of easy axis during the SRT. We are able to clearly establish the nature of SRT to be of first order and accurately determine the transition temperature.

[1] Kumar et al. arXiv 1908.03927 (2019).

Position

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