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Nematic order and Fermi surface reconstruction of chalcogen Fe-based superconductors[1] JIUNN-YUAN LIN, Institute of Physic, National Chiao Tung University, Hsinchu 30010, Taiwan — We utilized the transport property measurements and polarized Fe L-edge XAS to explore nematic order and Fermi surface reconstruction in FeSe. Temperature-dependent magnetoresistance and the Hall coefficient, together with XAS and XLD, on single crystals with state-of-art quality will be carried out through both the nematic and the pseudogap temperatures. This work is to elucidate the existence of Fermi surface reconstruction in FeSe in which no SDW was observed. Moreover, whether this electronic structure change has a nematic or magnetic origin will be answered.

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