"固体所青联会"第五十期学术论坛

报告题目: Detecting the Quantum oscillation in

high magnetic fields

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举办单位: 中科院固体物理研究所青年联合会

中科院青年创新促进会合肥物质科学研究院小组

报告摘要: Measurement of quantum oscillations is a very powerful way for studying the Fermi-surface topologies. Recently, several techniques for probing the quantum oscillations had been successfully constructed in our Water-Cooled magnets with the highest field up to 38.5T and lowest temperature down to 0.3K. In this presentation, I will first explain the basic principles of torque magnetometry and demonstrate its applications on topological materials and superconductors. In the second part, I will report our preliminary result of ZrTe₅. From systematic changes of Shubnikov-de Haas oscillations, we find a pressure-induced topological quantum phase transition of ZrTe₅.

欢迎各位老师和同学参加!