



Physical Sciences Seminar

Unveiling the hidden topology in the Fermi-surface wavefunction of metals

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A metal is a solid with a Fermi surface. It is known how to reconstruct the shape of the Fermi surface by immersing the metal in a magnetic field and measuring the period of field-induced oscillations of the magnetization/resistivity. I will show how to extract information about the quantum-mechanical wavefunction of the Fermi surface from measuring the phase offset of these same oscillations. In some metals, this information is robust against deformations of the Hamiltonian (describing the metal), and may therefore be viewed as a topological invariant.

Thursday, March 22, 2018 10:00am - 11:00am

IST Austria Campus Mondi Seminar Room 2, Central Building



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.