

## **Physical Sciences Seminar**

## Unveiling the hidden topology in the Fermisurface wavefunction of metals

## Aris Alexandradinata

Yale U

Host: Maksym Serbyn

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

Mondi Seminar Room 2, Central Building



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

www.ista.ac.at | Institute of Science and Technology Austria | Am Campus 1 | 3400 Klosterneuburg