



Topological heat transport

Date: April 12, 2023 (Wednesday)

Time: 10:00 a.m.

Zoom Online Lecture: <https://bit.ly/40hIjyC>

Meeting ID: 969 7547 2947

Password: 2859



Prof. Dima FELDMAN
Brown University



Abstract:

The quantization of the electrical conductance is the defining property of the quantum Hall effect. Quantized electrical transport is often used for the classification of topological states of matter, but different topological orders may exhibit the same electrical conductance. Some topological systems, including Kitaev magnets, do not conduct electricity. At the same time, heat can flow in any material. We will review quantized thermal conductance in two-dimensional topological materials as well as recent experimental and theoretical advances in probing topological orders with heat transport.

Biography:

Professor Feldman joined the Brown Physics Department as a faculty member in 2003. A graduate of the Moscow Institute of Physics and Technology, he received his Ph. D. from the Landau Institute for Theoretical Physics in 1998. He has done his postdoctoral research at the Weizmann Institute of Science and Argonne National Laboratory. He was a recipient of the Koshland Scholar Award from the Weizmann Institute of Science and CAREER Award from NSF. Professor Feldman's research focuses on theoretical condensed matter physics with emphasis on strongly correlated electrons in low-dimensional systems, and quenched disorder in hard and soft condensed matter.

Anyone interested is welcome to attend!

Phone: 28592360 Fax: 25599152