



## Einladung zum Vortrag

# Low-dimensional transport and exotic quasiparticles

von

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**Ort: Christian-Doppler-Hörsaal**

9. Boltzmannngasse 5 / Strudlhofgasse 4, 3. Stock

### **Abstract:**

Low-dimensionality, quantum disorder, or non-trivial topology of physical ground states often are the basis for the emergence of exotic quasiparticles with unusual properties. Such include dissipation-free transport, unusual statistics, and spin-momentum locking, to name just a few. In this talk I will show, upon addressing primarily low-dimensional quantum magnets, but also topologically non-trivial electronic materials, and superconductors, how transport experiments bring about indispensable information for revealing and rationalizing the peculiar nature of exotic quasiparticles. Thereby, I will discuss experiments on bulk materials, nanoscale devices, and at the atomic scale.