Seminarankündigung
(gem. mit Sem. Richter)

Sprecher: Prof. Dr. Inanc Adagideli
Sabanci University

Ort: PHY 4.1.13

Zeit: Mittwoch, den 24.07.2013, 10.15 Uhr

Thema: Splitting electrons with dirt: Majorana fermions from disorder and superlattices

Abstract:

In this talk I will focus on inducing topological state from regular, or irregular scattering in (i) p-wave superconducting and (ii) proximity coupled Rashba wires. In particular, I will discuss how, while being detrimental to the topological order in p-wave wires, the disorder can induce topological state in Rashba wires contrary to common expectations. The total phase space area of the topological state is conserved for long disordered wires, and can even be increased in an appropriately engineered superlattice potential. I will conclude with a discussion of recent experiments, which was conducted on dirty Rashba wires, in the light of these new results.

Ansprechpartner: K. Richter