

Special Seminar

Speaker

Dr. Carlo Beenakker

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Date Nov. 11th, 2013 (Monday)

Time 3:30 PM ~ 4:30 PM
Right after the "Condensed Matter Physics Seminar"

Location R833, CCMS & New Physics Building

Topic

The search for Majorana fermions in superconductors

Abstract

Since the discovery of electron-positron annihilation we know that some particles have an antiparticle and if the two meet they destroy each other. Ettore Majorana suggested in the 1930's that a particle might be its own antiparticle, so pairs would have to remain widely separated to survive. These Majorana fermions may or may not exist in Nature as fundamental building blocks, but in superconductors they can be constructed out of electron and hole excitations. The application may be found in the area of quantum computers, using pairs of Majorana fermions to store information.

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