THE CHINESE UNIVERSITY OF HONG KONG

Department of Physics

COLLOQUIUM

Evidence for Odd-Parity, Spin-Triplet Superconductivity in Sr_2RuO_4 and UTe_2

by



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Time: 10:00 - 11:00 a.m.
Place: L3, Science Centre, CUHK

ALL INTERESTED ARE WELCOME
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Abstract

A hallmark of unconventional superconductivity, which is associated with the symmetry properties of the superconducting order parameter, is the non-*s*-wave pairing. In this talk I will discuss the symmetry properties of two unconventional superconductors, Sr_2RuO_4 and UTe_2. The former is the only layered perovskite superconductor without the presence of Cu, which has been studied for many years. The latter is a newly discovered heavy fermion superconductor. Both are promising candidates for demonstrating odd-party, spin-triplet superconductivity. I will review the evidence for unconventional pairing found in these two superconductors and discuss our work on determining their symmetry properties, focusing on evidence obtained from the phase-sensitive experiments based on the Josephson effect.

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