

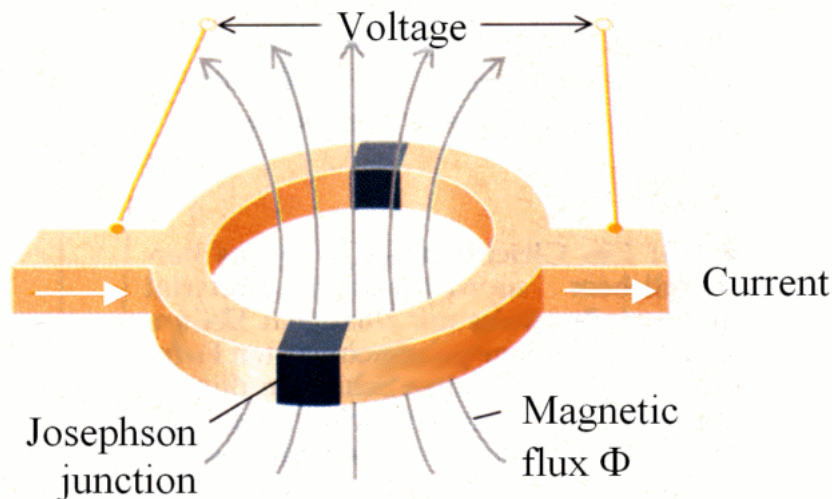
Physics Department Seminar

April 20th, 2012

11:00 AM in PhSc 105

The Superconducting Quantum Interference Device

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Abstract: The Superconducting Quantum Interference Device (SQUID) is a sensitive magnetometer, able to measure magnetic fields on the order of 10^{18} Tesla. The fascinating electrodynamics and thermodynamics which describe superconductivity will be discussed at both the macroscopic and microscopic levels. The primary physics of the SQUID is the fact that superconductors are macroscopic, phase coherent quantum mechanical objects, which will also be discussed in the context of the Bardeen-Cooper-Schrieffer (BCS) theory.