



第 105 回トポロジカル物質科学セミナー
Topological Materials Science Seminar (105)

Andreev and Majorana Weyl crossings in multi-terminal Josephson junctions

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Place: Room 401, Science Bldg. #5 (Physics), Kyoto University

Date: Aug. 22 (Thursday), 2019

Time: 10:30 -12:00

Abstract:

We analyze the Andreev spectrum in a four-terminal Josephson junction between conventional and topological superconductors. We find that a topologically protected crossing in the space of three superconducting phase differences can occur between the two Andreev bound states with lower energy. We discuss the possible detection of this crossing through the nonlocal conductance quantization between two voltage-biased terminals.