

平成 17 年 10 月 24 日

応用物理学会北海道支部
会員各位

応用物理学会北海道支部

講演会のお知らせ

下記講演会を開催いたしますので、多数ご参加下さいますようご案内申し上げます。

演題：What is really measured in the mesoscopic Aharonov-Bohm interferometer?

講師：Amnon Aharony 氏

(Tel Aviv University and Ben Gurion University, P r o f e s s o r)

日時：平成 17 年 11 月 4 日（金） 15:00～16:00

場所：北海道大学工学部物理工学系大会議室（A-1-17）

主催：応用物理学会北海道支部

講演の要旨

Mesoscopic solid state quantum dots have raised both basic and applied interest. Some of their physical properties are characterised by the quantum amplitude of resonant transmission of electrons through them. The talk presents an elementary review of experiments and theories describing the use of Aharonov-Bohm interferometers for measuring the phase of this (complex number) amplitude. These include "closed" interferometers, with only two terminals connected to the Aharonov-Bohm loop, and "open" interferometers, with more terminals. After explaining the differences between the mesoscopic and the textbook "two-slit" interferometers, the talk will explain how one could extract the desired phase from both "closed" and "open" experiments, both in the Coulomb blockade and in the Kondo regimes.

世話人 矢久保 考介

北海道大学工学研究科応用物理学専攻

電話：011-706-6621 内線 6621 yakubo@eng.hokudai.ac.jp