

Joint CQSE and CASTS Seminar

Weekly Seminar
May 17, 2013 (Friday)

TIME May 17, 14:30 ~ 15:30
TITLE Josephson-junction based superconducting quantum circuits
SPEAKER Prof. Chii-Dong Chen
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PLACE Rm716, CCMS & New Physics Building, NTU

Abstract

Josephson junctions possess tunable discrete energy spectrum and can play the role of natural atom in the cavity quantum electrodynamics. Because of that, Josephson junction based superconducting circuits are promising candidates for future quantum electronics. In this talk, I will present our recent experiments on probing energy levels in large Josephson junctions by means of DC and RF techniques. In addition, voltage noise of Josephson junction of various junction areas was found to give a quadratic dependence on the bias voltage. We will discuss the origin of this noise property.

