

Joint CQSE and CASTS Seminar

2020
Mar. 27, Friday

TIME Mar. 27, 2020, 2:30~3:30pm
TITLE Building Quantum Information Hardware with
Superconducting Fluxonium Qubits.
SPEAKER Prof. Yen-Hsiang Lin
Dept. of Physics, National Tsing Hua University
PLACE Rm716, CCMS & New Physics Building, NTU

Abstract

Quantum superconducting circuits based on Josephson tunnel junctions have become a leading platform in the subjects of quantum information. By inserting a Josephson junction array served as an inductance, a fluxonium superconducting qubit has several extraordinary properties including extra degree of freedom for engineering, tunable multi-level spectrum with large anharmonicity. A single fluxonium superconducting qubit has the longest energy relaxation time (T_1) and the longest coherence time (T_2) among different types of single superconducting qubits. In this talk, I will also present ideas of constructing hardware for gate-based quantum computing, quantum simulation, and quantum sensing with fluxonium superconducting qubits.

▲防疫期間僅限本校人員參與，另外 3/8~3/22 曾到訪中研院南港院區任何區域者請在家中自主健康管理
Open for members of National Taiwan University except for someone who has been to Academia Sinica (Nangang District) during Mar.8th ~ 22th.

▲拒絕有發燒或呼吸道症狀者入場
Individuals with fever or respiratory symptoms are prohibited from participating in the event.

▲強烈建議全程戴口罩並與鄰座參與者保持間隔
Wearing sanitary masks all the time and keep gaps between each other are highly recommended.

▲場地備有酒精供雙手消毒使用
We provide alcohol sanitizer to keep your hands clean.

