PhD Oral Defense

Date: **30 July 2021 (Friday)** **Time:** **3:00pm**

Thesis Title

Reconfigurable Dielectric Resonator Antennas for Wireless Communications

Mr. LIU Xiyao (Supervisor: Prof. LEUNG Kwok Wa)

Abstract

In recent years, reconfigurable antennas have been extensively studied because of their strong abilities to dynamically change their radiating features, including frequency, polarization, and radiation pattern, to meet the requirements of different wireless systems. However, among the main types of reconfigurable antennas, namely, dipole, slot, microstrip patch, and leaky-wave antennas, only a few are categorized as electrically controlled reconfigurable dielectric resonator antennas (DRAs). In this thesis, three different reconfigurable DRAs are investigated, namely the frequency-reconfigurable filtering DRA, polarization-reconfigurable omnidirectional DRA, and pattern- and polarization-reconfigurable DRA. These DRAs were fabricated and tested. Good agreement between simulations and measurements was obtained.