



THE CHINESE UNIVERSITY OF HONG KONG
Department of Physics &
School of Life Sciences
JOINT SEMINAR

**Electrophysiology: Unplugged. Chemical
Tools to Measure and Monitor Membrane
Potentials in Living Cells**

by

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Date: January 29, 2024 (Monday)

Time: 11:30 a.m. - 12:30 p.m.

Place: L4, Science Centre, CUHK

ALL INTERESTED ARE WELCOME

Abstract

Cells spend a substantial portion of their energy budget to maintain an electrochemical potential difference across the plasma membrane. Optical methods to measure changes in cellular membrane potential provide a powerful complement to traditional, electrode-based methods by providing spatial resolution. My lab has been developing synthetic, voltage-sensitive fluorescent indicators that respond to changes in membrane potential via a photoinduced electron transfer mechanism. In this presentation, I will discuss my group's recent efforts to apply fluorescent indicators to living cells to interrogate cellular physiology.