

2013년 2학기

수학전공 Colloquium

◆ **제 목 :** **Epidemiological Models and Optimal Control Theory**

◆ **연 사 :** **이선미(경희대)**

◆ **초 록 :** Optimal control theory has been successfully used in many decision making areas such as economics, biology, physics and engineering. In In this talk, we focus on optimal control problems in the context of epidemiological applications. These problems can involve ordinary differential equations, discrete system, and partial differential equations to study the dynamics of influenza transmission. First, few mathematical models of influenza dynamics are considered and next, we identify and characterize optimal controls and also evaluate their impact on the disease dynamics. In particular, we seek optimal treatment and isolation interventions or optimal age-specific vaccination strategies. This This study highlights insights on the role of effective public health policies to mitigate the spread of influenza.

◆ **일 시 :** **9월 25일(수) 오후 5시**

◆ **장 소 :** **5동102**