

Colloquium

Effects of Vaccination and Limited Medical Resources in a Discrete Epidemic Model

主講人：梁育豪 教授

國立高雄大學應用數學系

時 間：112 年 02 月 14 日(二) 16：20

地 點：應用數學系多媒體教室(理 408 室)

摘 要：

Mathematical modeling is a fundamental tool to understand the dynamics of the spreading of a disease. In this talk, we consider a discrete epidemic model with vaccination and limited medical resources. Our model induces a nonsmooth two dimensional map that exhibits a surprising array of dynamical behavior including the phenomena of the forward-backward bifurcation and period doubling route to chaos with feasible parameters in an invariant region. Some theoretical results derived for our model and numerical simulations to illustrate our main results will be shown in this talk. This is a joint work with Jonq Juang, Yu-Jhe Huang and Tai-Yi Kuo.

