

Michigan Math Club

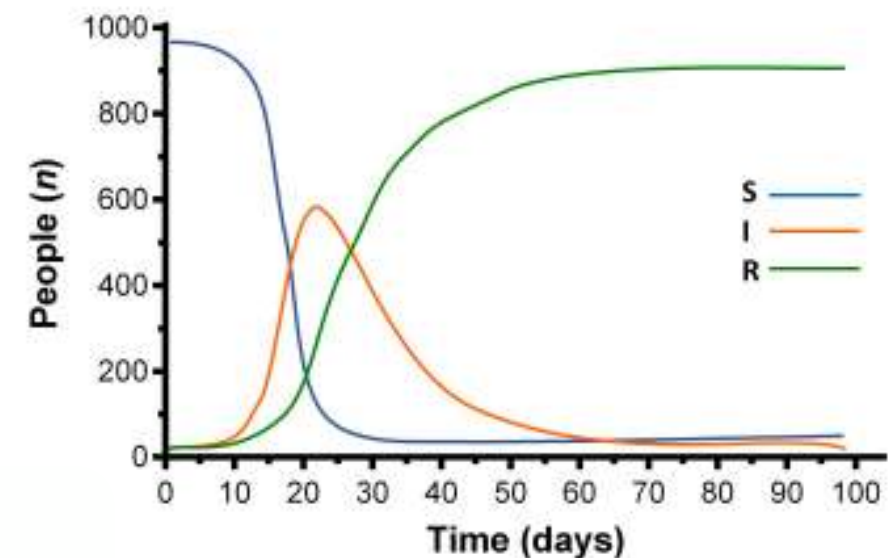
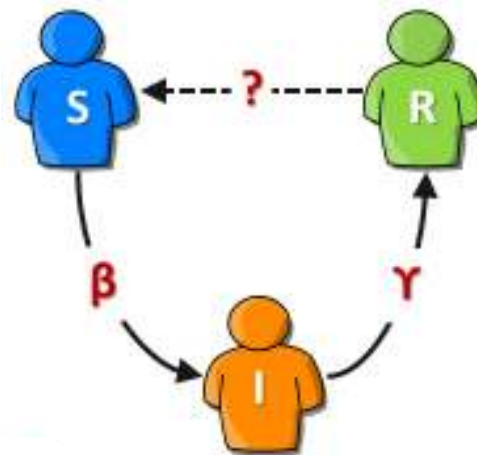
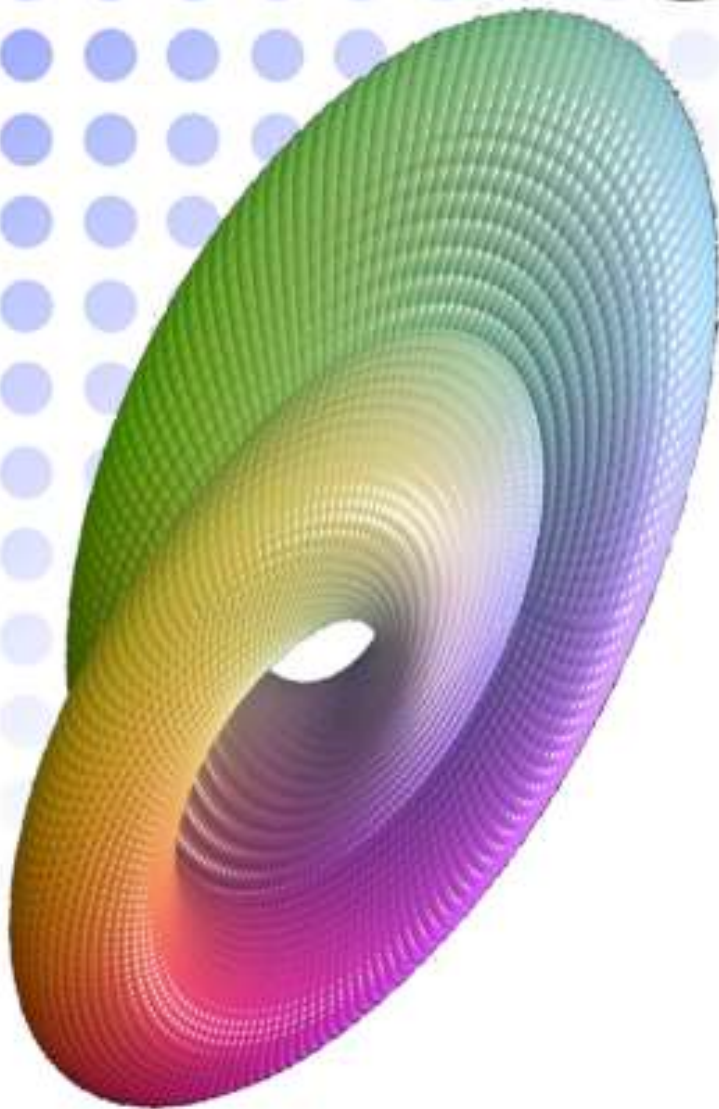


Thursday at 4pm in EH1360

Free pizza and pop afterwards!

An Introduction to Disease Modeling

Jessie Conrad • 24 March 2022



Susceptible-Infected-Removed (SIR) modeling has been used extensively over the last century as a basic framework for predicting disease spread through populations. Techniques have been developed to calculate the average invasion speed (called the reproduction number), epidemic peak size, equilibria, and the impact of mitigation tactics. Here we will review some of this work, and present current extensions to this model using spatial spread and mitigation strategies.