

عنوان مقاله:

A Model for Transmission of Infection in a Population

محل انتشار:

دومین کنفرانس ملی سیستم های دینامیکی و نظریه های هندسی ایرانی (سال: 1397)

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خلاصه مقاله:

A continuous-time model for transmission of infection in a population is investigated. It is shown that the model has two equilibria: the infection-free equilibrium and the infected equilibrium. A specific threshold in terms of model parameters is obtained and then existence of the equilibria and asymptotic stability of the system are stated by means of this threshold. Finally, the results are also considered numerically.

کلمات کلیدی:

Dynamical System, Stability, Routh-Hurwitz criterion

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