

Can the Lotka-Volterra and mass-action canonical forms for kinetic systems be used to study SIR-PH type epidemic models?

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SUMMARY

We propose exploiting the Lotka-Volterra and mass-action canonical forms for studying epidemic models, and illustrate the results obtained for a SIR-PH type example.

Keywords: Essentially non-negative polynomial ODE systems, Lotka-Volterra canonical form, chemical reaction networks, mass-action kinetics, steady states, multistationarity

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