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Qualitative study of a stochastic SIS epidemic model with vertical transmission

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Highlights

A new stochastic SIS epidemic with vertical transmission model is investigated.

By constructing suitable stochastic Lyapunov function, we establish sufficient conditions for the existence of a stationary probability measure of the model.

Our results show that noise can suppress the disease outbreak.

With profound respect, Yours sincerely,

Xiao-Bing Zhang

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