Accepted Manuscript

Dynamics analysis of epidemic and information spreading in overlay networks

Guirong Liu, Zhimei Liu, Zhen Jin

PII: S0022-5193(18)30062-6 DOI: 10.1016/j.jtbi.2018.02.010

Reference: YJTBI 9353

To appear in: Journal of Theoretical Biology

Received date: 1 June 2017
Revised date: 4 January 2018
Accepted date: 13 February 2018



Please cite this article as: Guirong Liu, Zhimei Liu, Zhen Jin, Dynamics analysis of epidemic and information spreading in overlay networks, *Journal of Theoretical Biology* (2018), doi: 10.1016/j.jtbi.2018.02.010

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- An overlay networks model of epidemic and information spreading is proposed.
- We derive the explicit formula for the basic reproduction number of disease
- The effect of awareness can reduce the basic reproduction number of dis-
- We theoretically analyze global asymptotic stability of equilibria.

Download English Version:

https://daneshyari.com/en/article/8876775

Download Persian Version:

https://daneshyari.com/article/8876775

<u>Daneshyari.com</u>