

Abstract Submitted
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Epidemic spreading on preferred degree adaptive networks¹ SHIVAKUMAR JOLAD, WENJIA LIU, R.K.P. ZIA, BEATE SCHMITTMANN, Virginia Tech — We report our study of SIS epidemic spreading model on networks where individuals have a fluctuating number of connections around some preferred degree. By making our preferred degree depend on the level of infection, we model the response of individuals to the prevailing epidemic. This helps us to explore the feedback mechanisms between the dynamics on the network and dynamic of the network. We will discuss the effect of such feedback mechanisms on the SIS phase diagram. We have also explored the SIS model on two communities with a coupling between them.

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