Accepted Manuscript

Complex contagions with social reinforcement from different layers and neighbors

Ling-Jiao Chen, Xiao-Long Chen, Meng Cai, Wei Wang

PII: S0378-4371(18)30325-X
DOI: https://doi.org/10.1016/j.physa.2018.03.017
Reference: PHYSA 19351

To appear in: *Physica A*

Received date : 2 January 2018
Revised date : 5 February 2018

Please cite this article as: L.-J. Chen, X.-L. Chen, M. Cai, W. Wang, Complex contagions with social reinforcement from different layers and neighbors, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.03.017

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.

***Highlights (for review)**

ACCEPTED MANUSCRIPT

Highlight

1. We propose a non-Markovian model to describe complex contagions on multiplex networks.
2. The final adoption size will increase sharply with the information transmission probability at a larger adoption threshold.
3. There is a critical seed size below which the global contagion becomes impossible for large values of adoption threshold.
4. An edge-based compartmental (EBC) theory is developed to describe the proposed model.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/7375488

Download Persian Version:

https://daneshyari.com/article/7375488

Daneshyari.com