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The competitive information spreading over multiplex social networks

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*Highlights (for review)

Highlights

- A competitive information model is formulated over the multiplex network.
- The final density of stiflers increases with the growth of the spreading rate, while it would decline with the increase of the removal rate.
- Controlling two exchanging rates can be used for accurately predicting the growth and absolute dominance between information 1 and 2.
- The spreading process of the competitive information is closely related to the node degrees on multiplex networks.
- Using a combination of real and artificial composite networks, we evaluate the dynamical properties of the new information model.