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Dynamical processes and epidemic threshold on nonlinear coupled multiplex networks

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Highlights

- We propose a nonlinear coupled information-epidemic model.
- We demonstrate a probabilistic description of the dynamical processes by MMCA.
- The epidemic threshold is determined by the topology of coupled network and p_i^A.
- The change of upload and deletion rate has little effect on the epidemic spreading.
- We find the inflection point of β_c as a function of λ in the case of $\lambda < \lambda_c$.