

Distinguishing between Topical and Non-topical Information Diffusion Mechanisms in Social Media



MAX-PLANCK-GESELLSCHAFT

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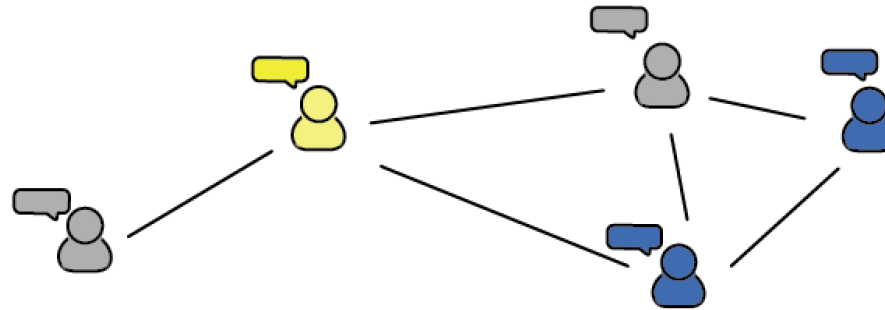


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User/meme topicality



- We infer a **topical distribution** for each user and meme



Topical meme = **narrow** topical distribution

- political: **#britishelection**, **#iranelection**
- innovative: **#mytouch**



Non-topical meme = **uniform** topical distribution

- satiric idioms: **#uknowyouugly**, **#bestsex**



Complex contagion

Centola et al., 2007
Romero et al., 2011

Complex contagion:

- controversial and risky information requires **multiple exposures** to spread (e.g., **political and innovative** information)

Simple contagion:

- information spreads after **individual exposures** (e.g., **idioms**)



Non-topical memes

Topical memes:

