

# Diffusion of innovation within an agent-based model: Spinsons, independence and advertising

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Diffusion of innovation - information

Model presentation

Comparison (Fig. 6) GIF!

## Concentration in time

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Concentration

$$c_t = \frac{N_{\uparrow}(t)}{N}$$

where

- $N_{\uparrow}(t)$  - number of adopted people, i.e. spinsons with opinion = 1
- $N$  - number of people in network

Comparison - Fig. 7 (left)

Comparison (errors) - Fig. 10 (left)



Our work - simulation

Our work - simulation

# Comparison of models

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## Market penetration level

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Valley of death and  $h^*(p)$  description

Comparison - Fig. 9 (left) Simulations

Comparison - Fig. 10 (right) Theoretical results

Our work - simulation



Our work - simulation

# Comparison of models

Try to find universal  $h$

|                 | p    |     |     |
|-----------------|------|-----|-----|
| Graph           | 0.05 | 0.1 | 0.2 |
| 2D Lattice grid |      |     |     |
| Complete graph  |      |     |     |
| Watts-Strogatz  |      |     |     |
| Barabasi-Albert |      |     |     |

# Conclusions

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Thank you for your attention!