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

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Introduction

Diffusion of innovation - information

Model presentation

2D Lattice simulation

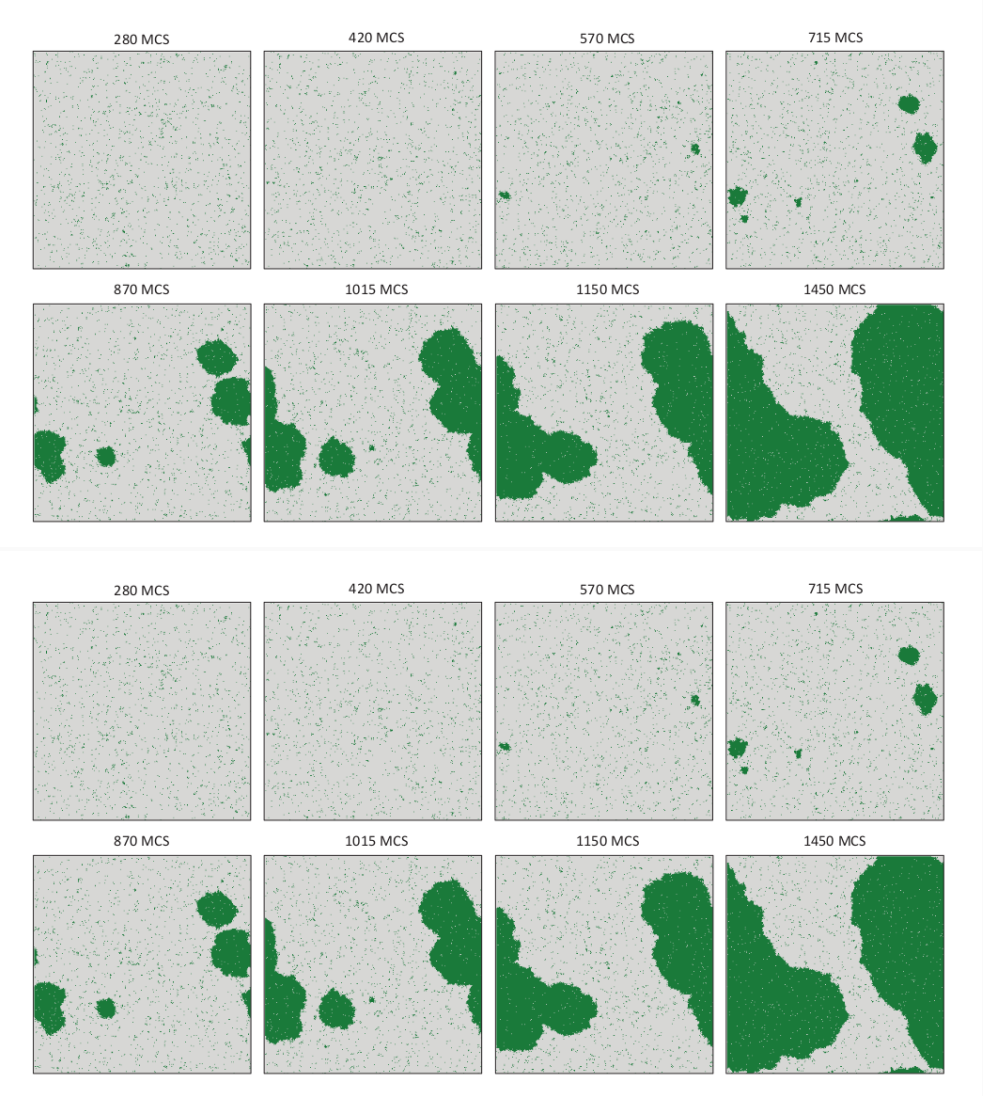


Figure 1: Up - publication; down - ours.

Concentration in time

Concentration

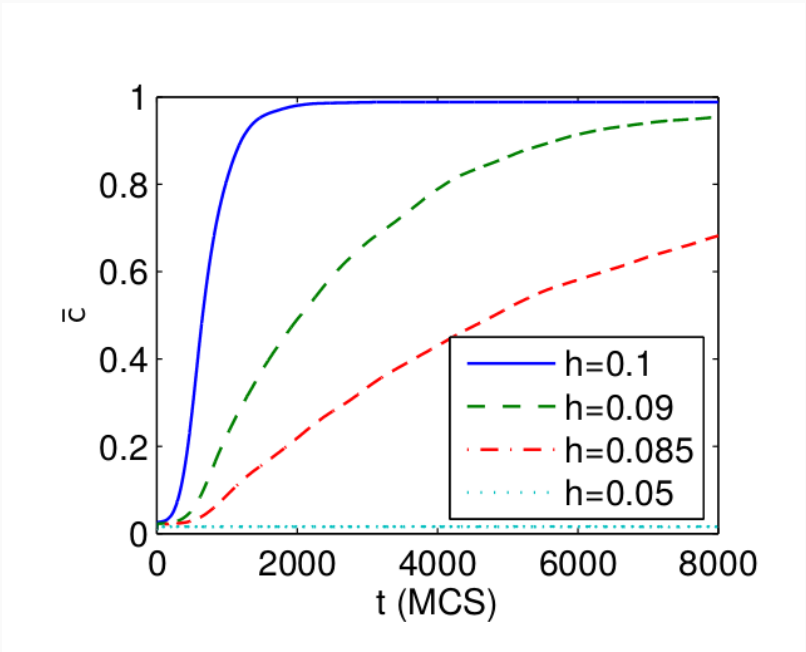
Concentration

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

where

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

2D Lattice results



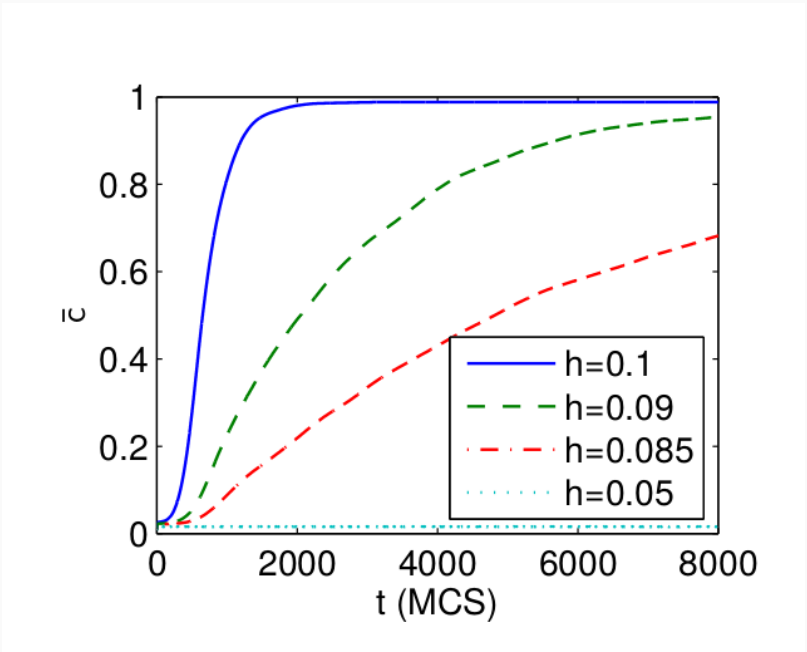
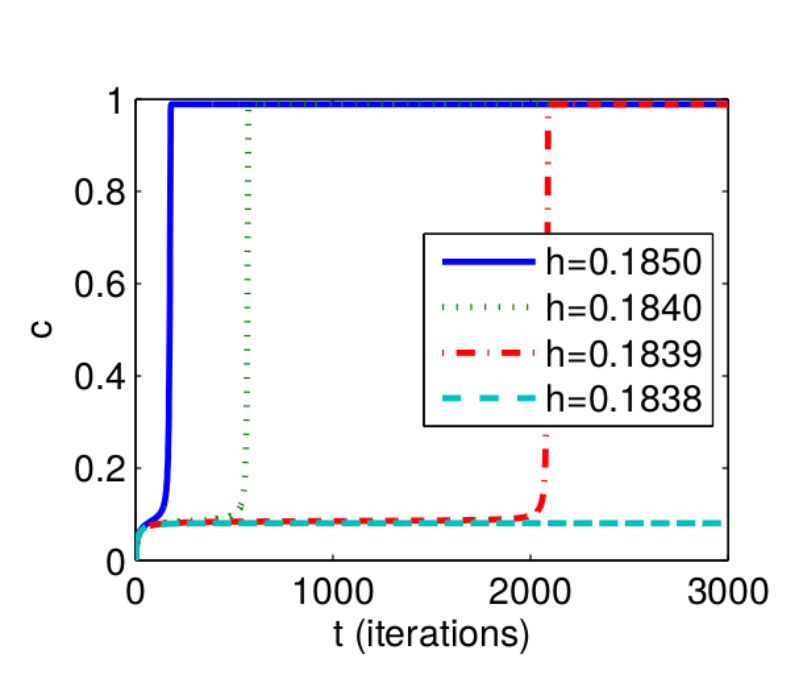


Figure 2: Left - publication; right - ours.

Complete graph results



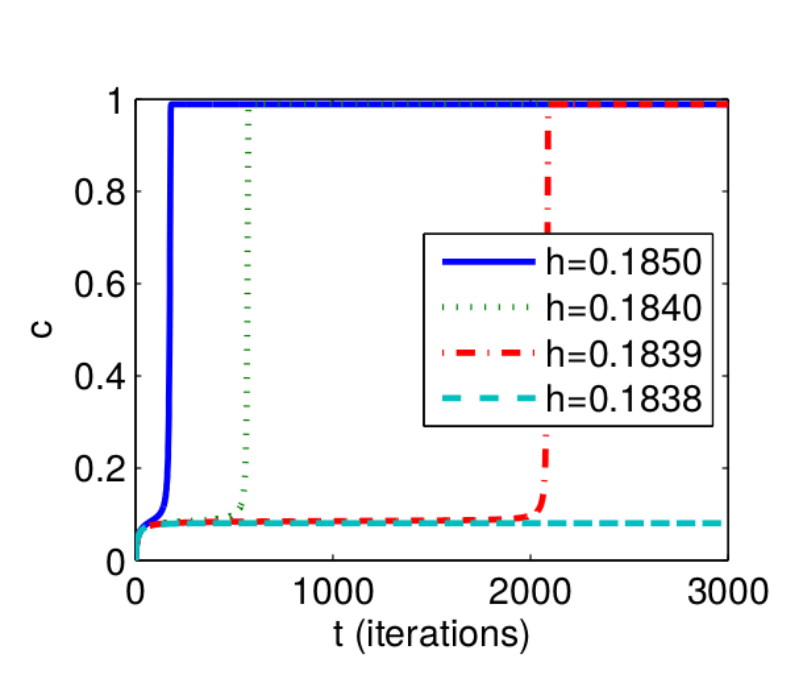


Figure 3: Left - publication; right - ours.

Watts-Strogatz results

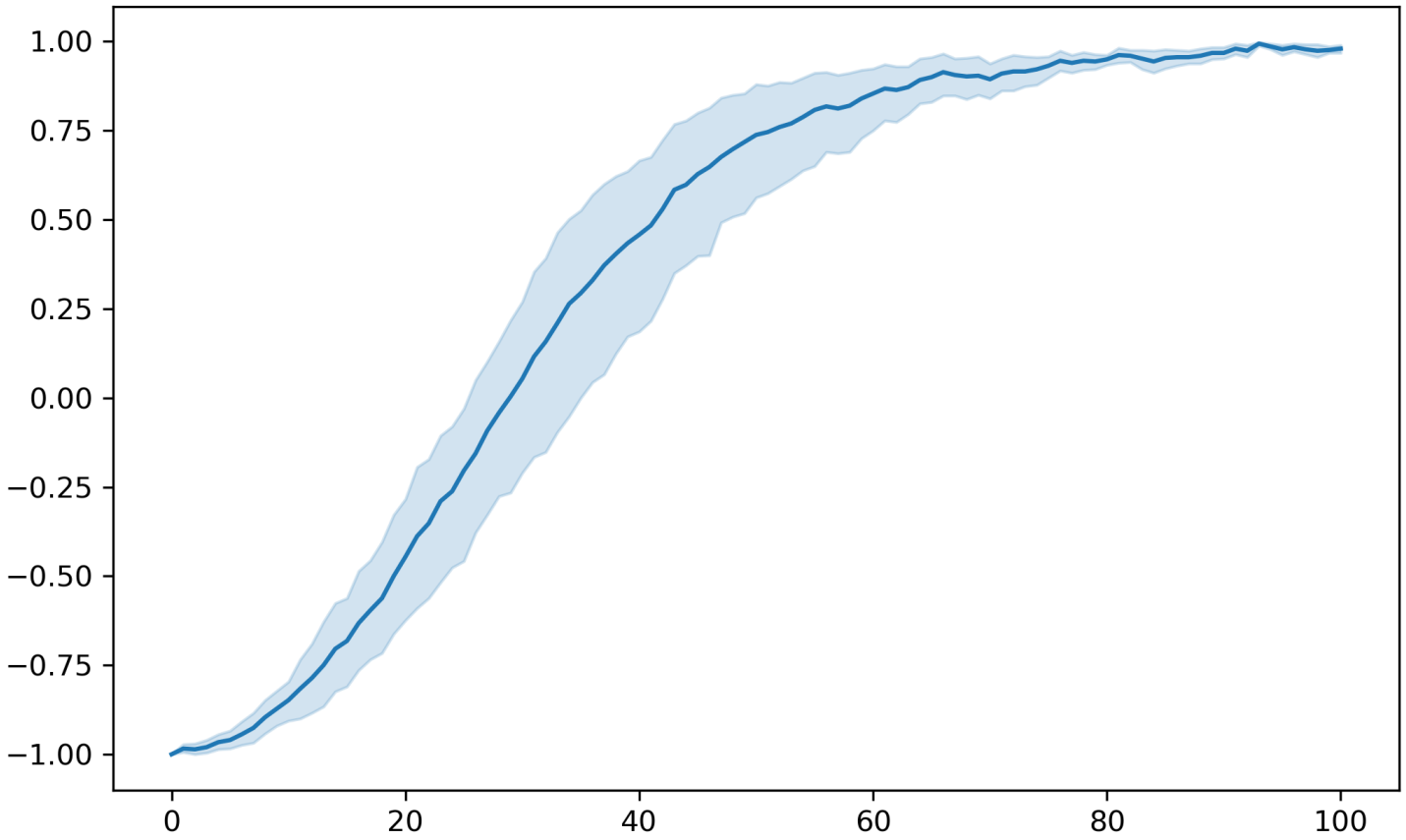


Figure 4: Our work - simulation.

Barabasi-Albert results

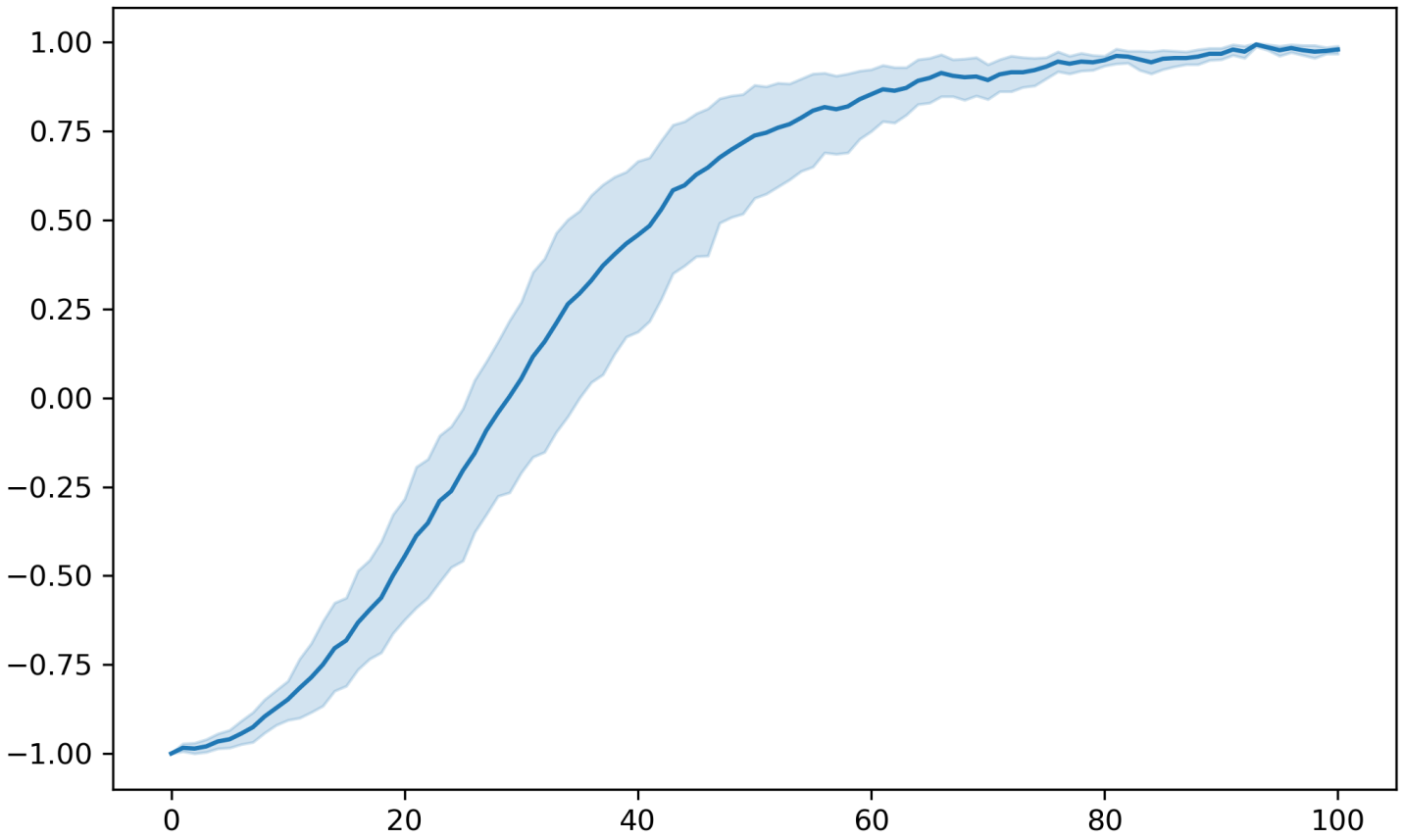


Figure 5: Our work - simulation.

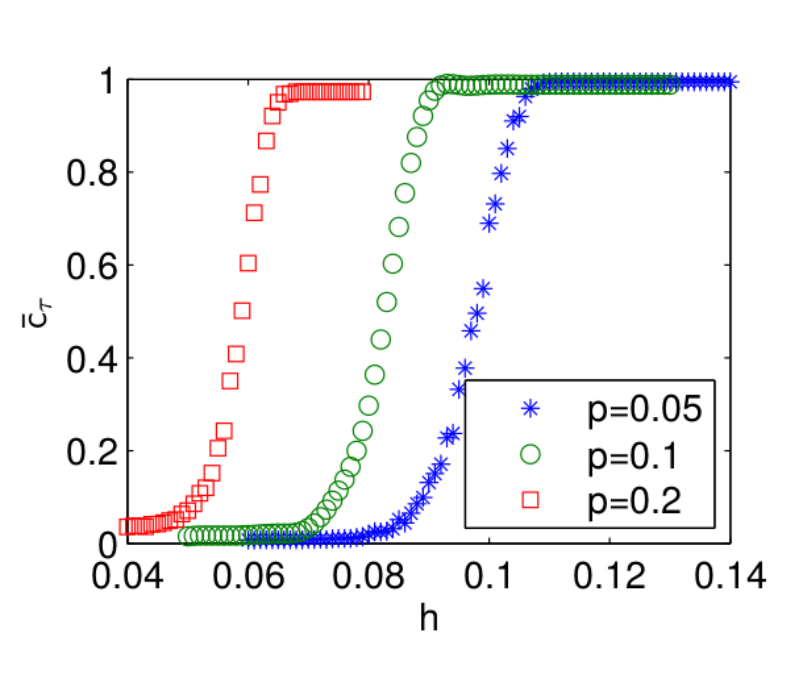
Comparison of models

Market penetration level

Valley of death

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

2D Lattice results



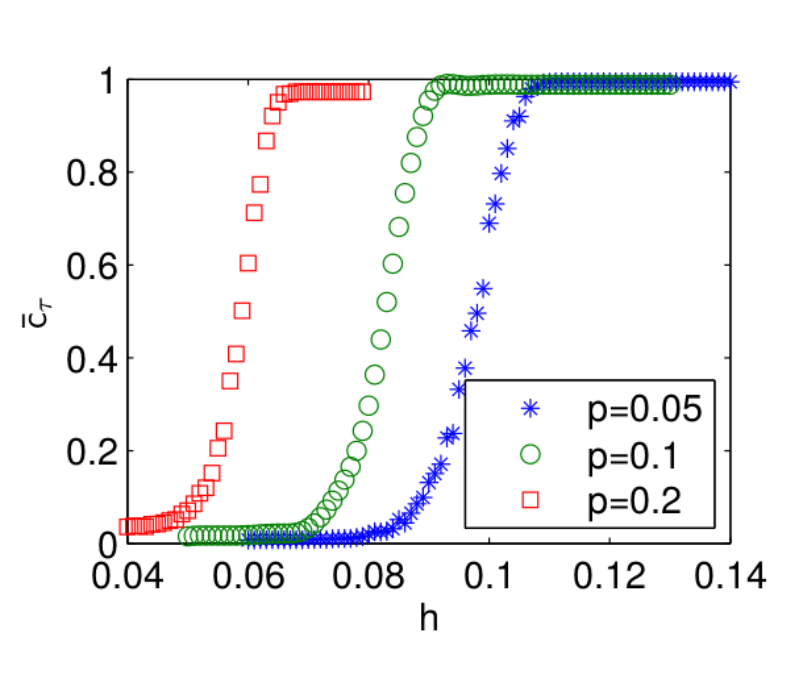
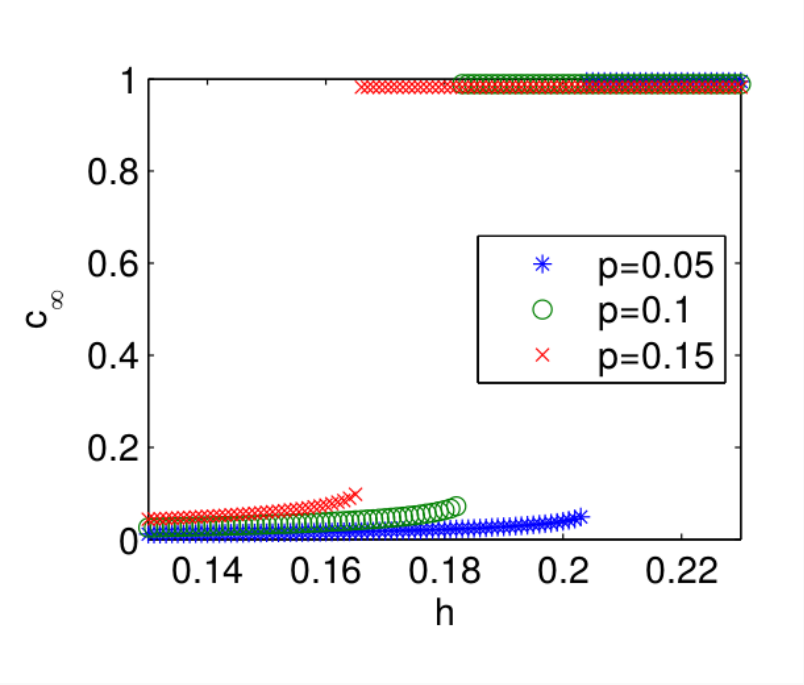


Figure 6: Left - publication; right - ours.

Comparison - Fig. 9 (left) Simulations

Complete graph results



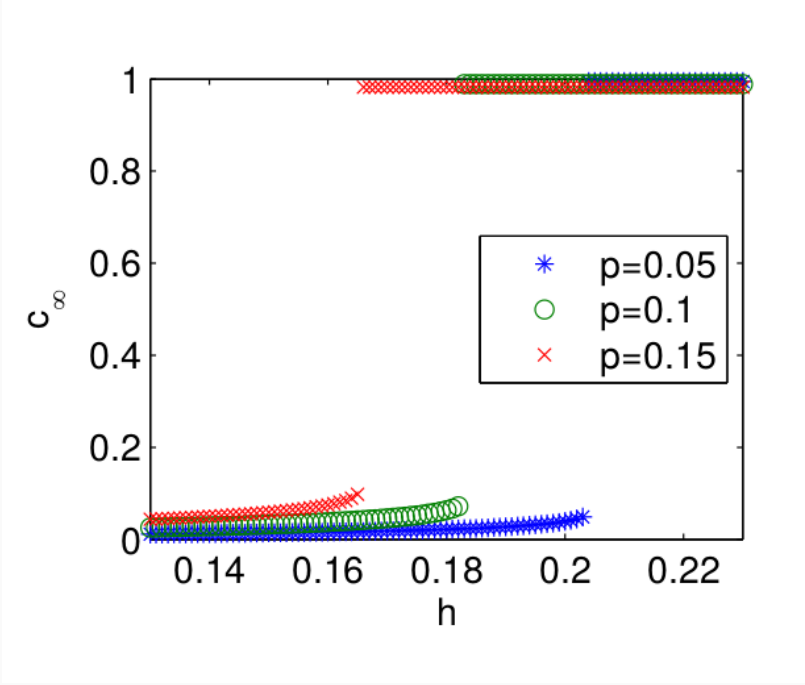


Figure 7: Left - publication; right - ours.

Comparison - Fig. 10 (right) Theoretical results

Watts-Strogatz results

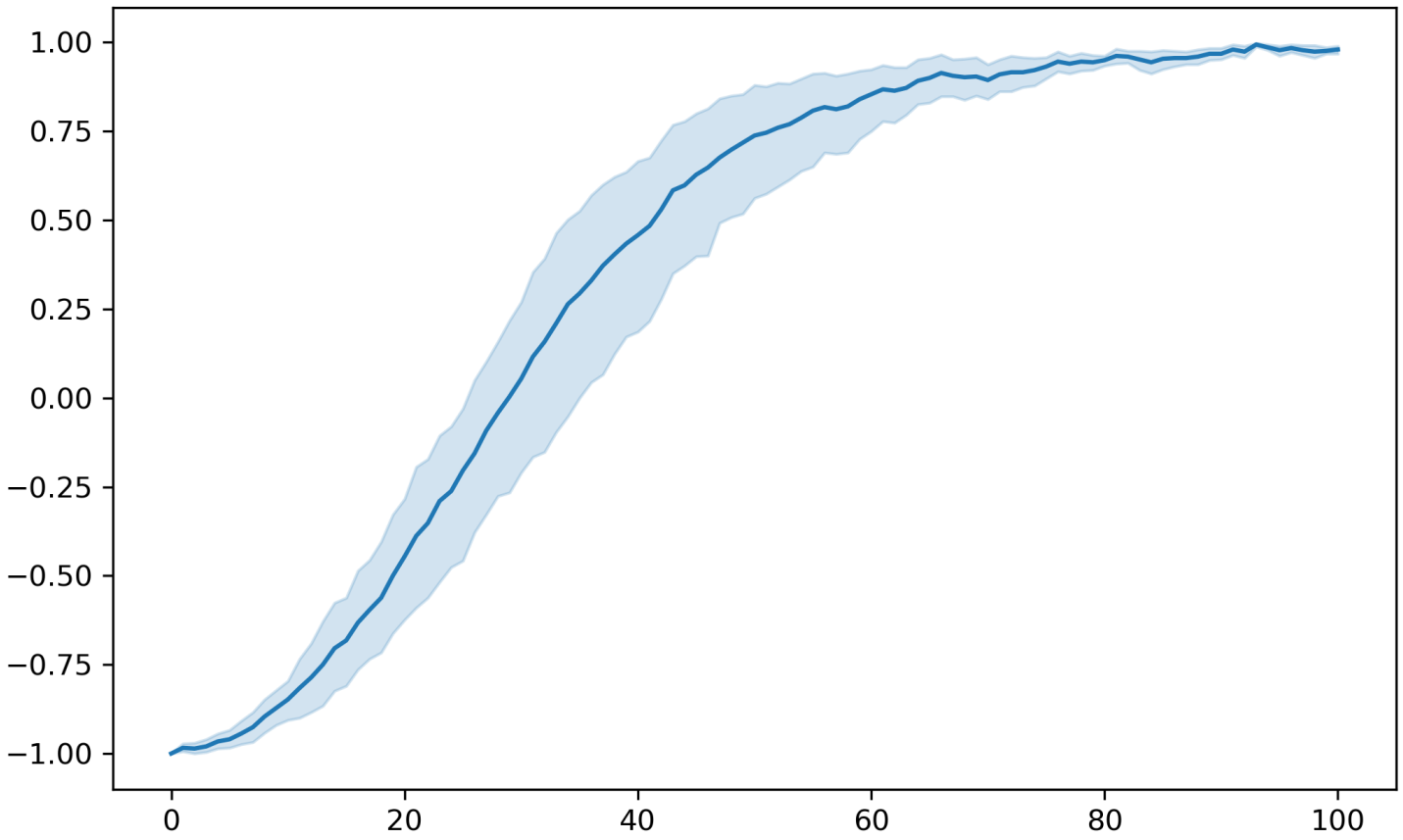


Figure 8: Our work - simulation.

Barabasi-Albert results

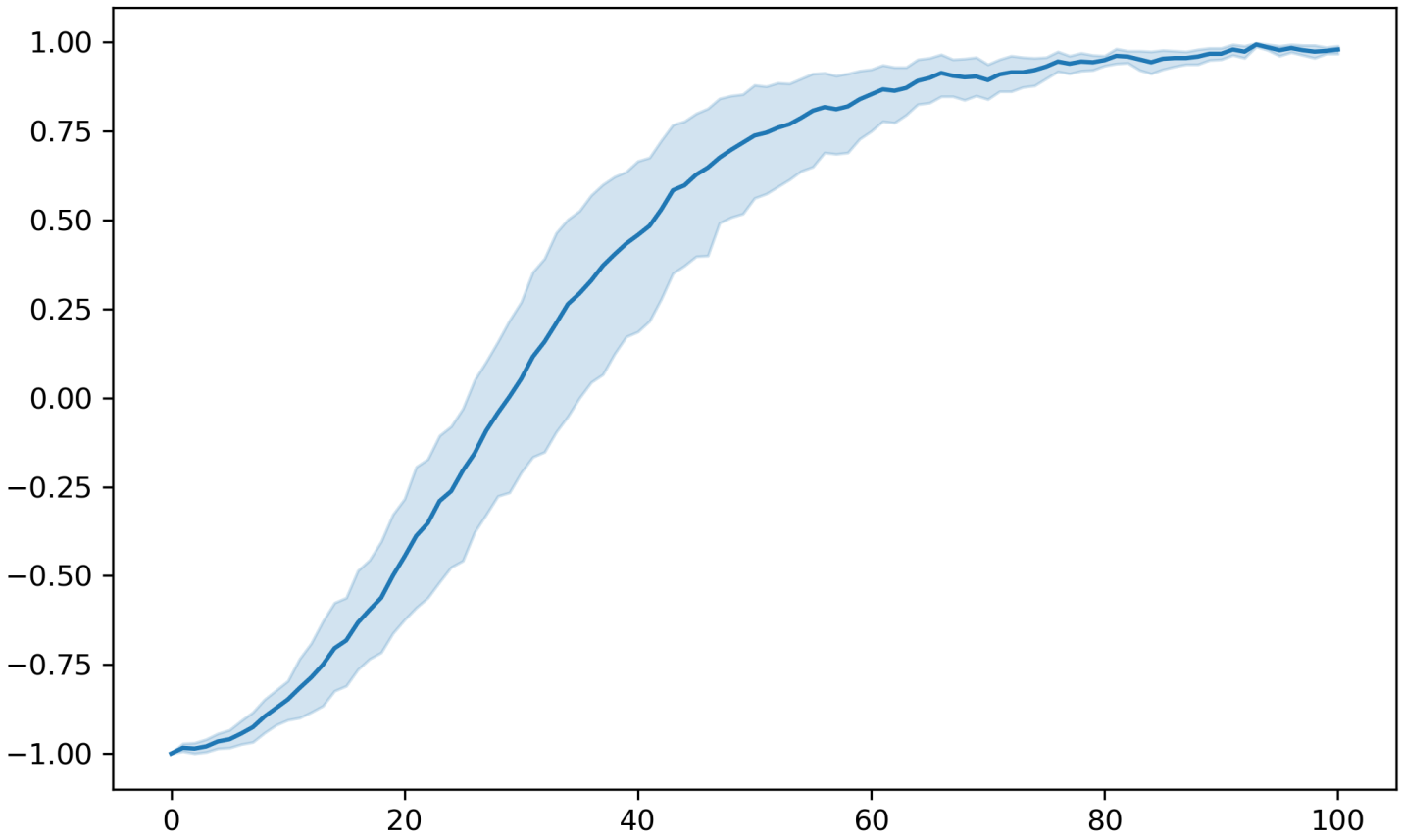


Figure 9: Our work - simulation.

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

Conclusions

content...

Thank you for your attention!