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# Active and passive DIFFUSION PROCESSES

## MODELS:

**THRESHOLD** – passive adoption based on the percentage of adopted neighbours
**PROFILE** – active adoption based on own preferences, and a chance for getting immunized
**PROFILE-THRESHOLD** – mixed behaviour of Threshold and Profile
**PROFILE-THRESHOLD-CURE** – additionally, a node can become spontaneously uninfected (cured)

## PARAMETERS:

T – threshold
P – profile
I – immunization probability

S – spontaneous adoption probability
C – cure probability

## GRAPHS:

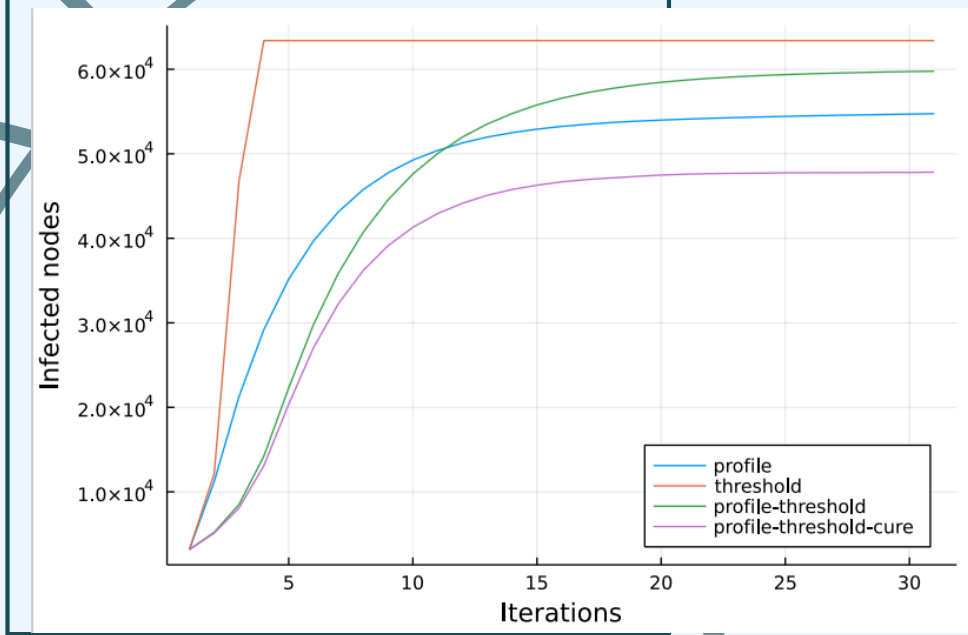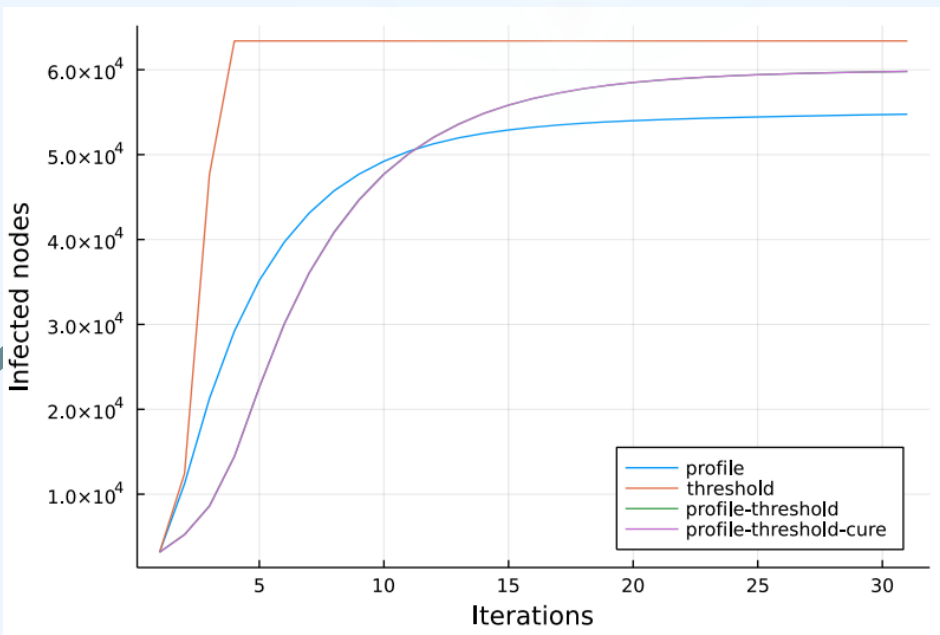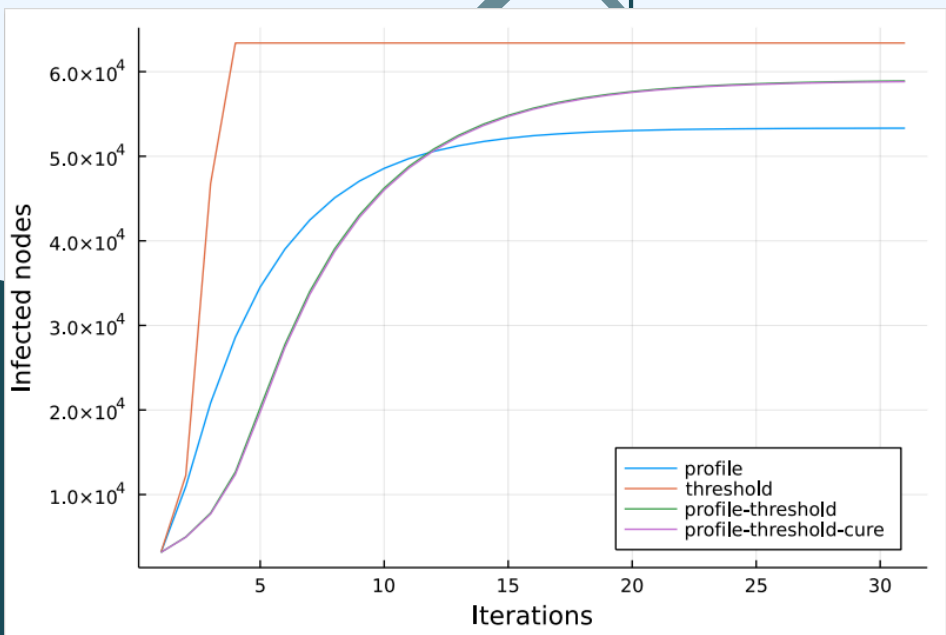**Barabasi-Albert with n=63392, m=13**
**Erdos-Renyi with n=63392, p=0.0004**
**Watts-Strogatz with n=63392, k=13, p=0.01**
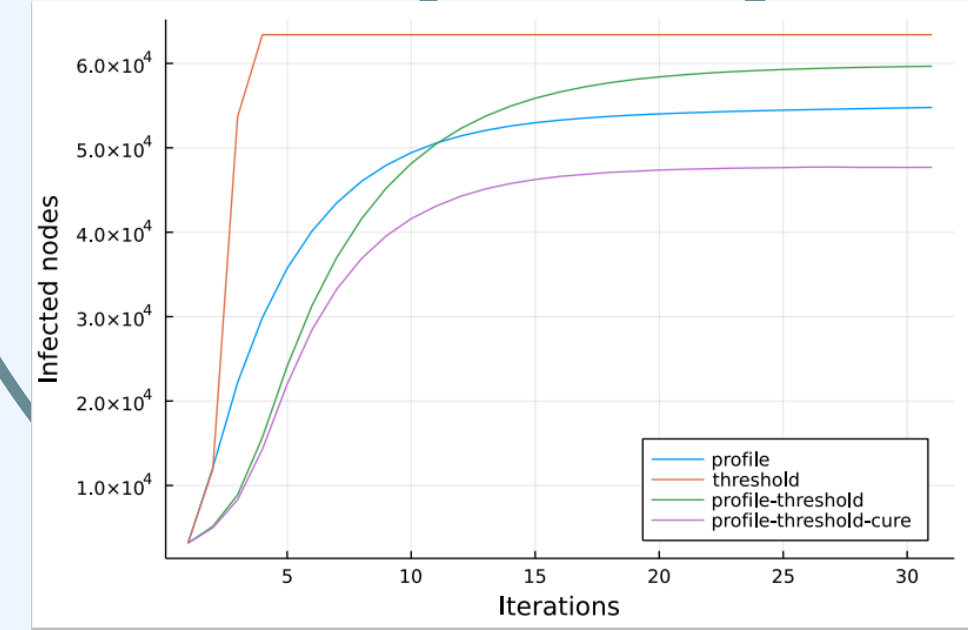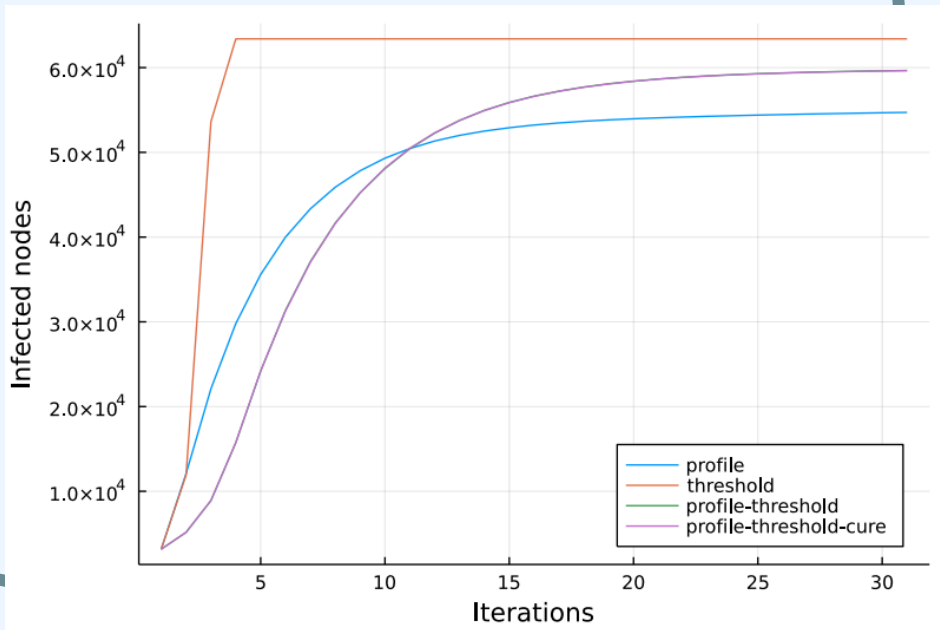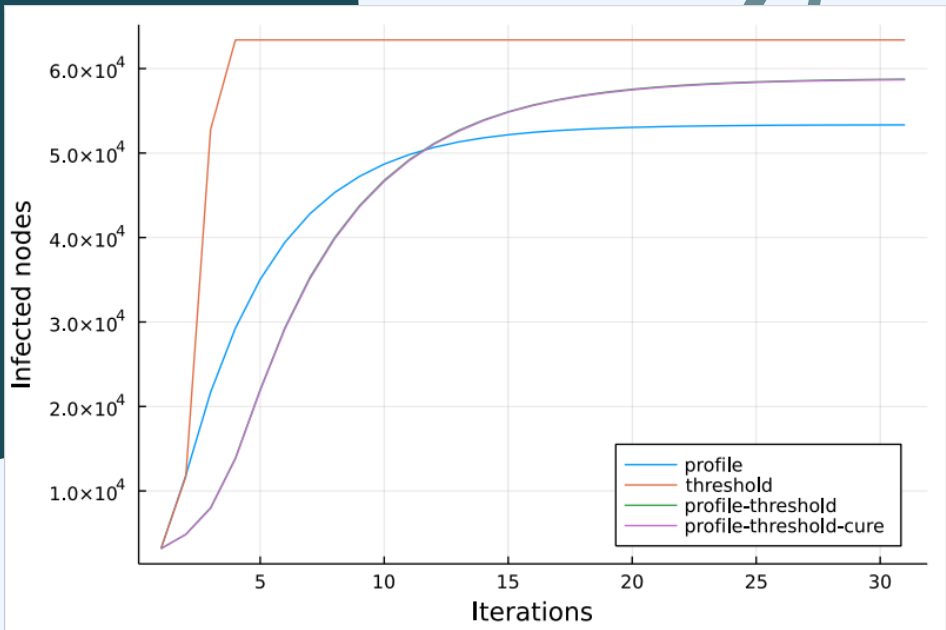
## ADDITIONAL INFLUENCE:

**Spontaneous adoption – adoption with a fixed probability**

### BARABASI-ALBERT



### ERDOS-RENYI



### WATTS-STROGATZ