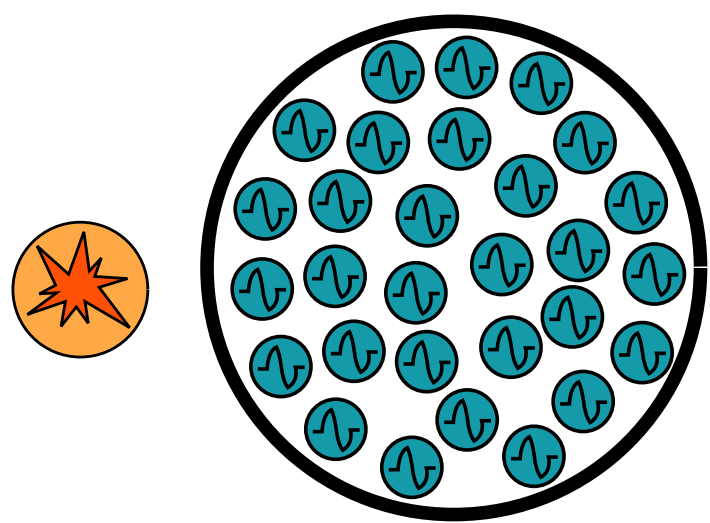
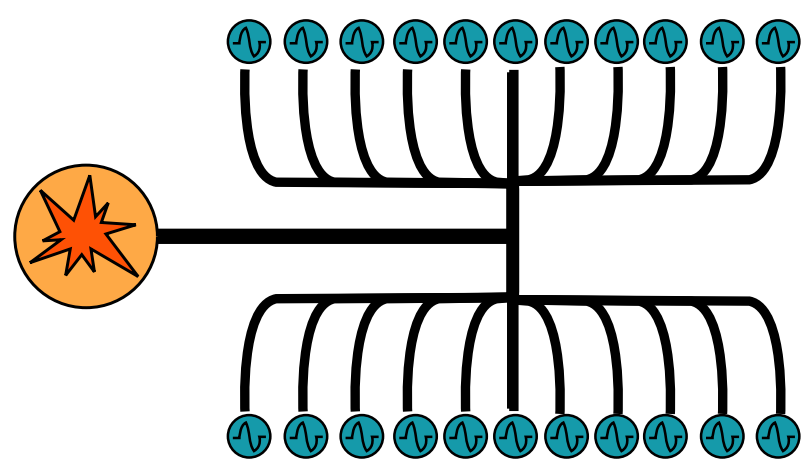


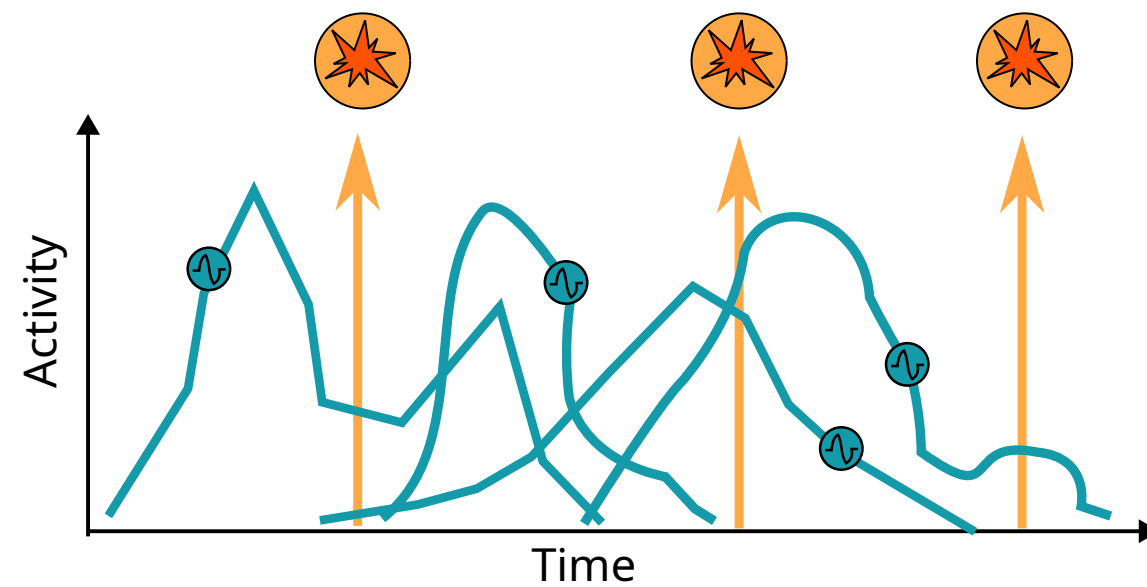
A Basic system characteristics for the emergence of global ring structure.



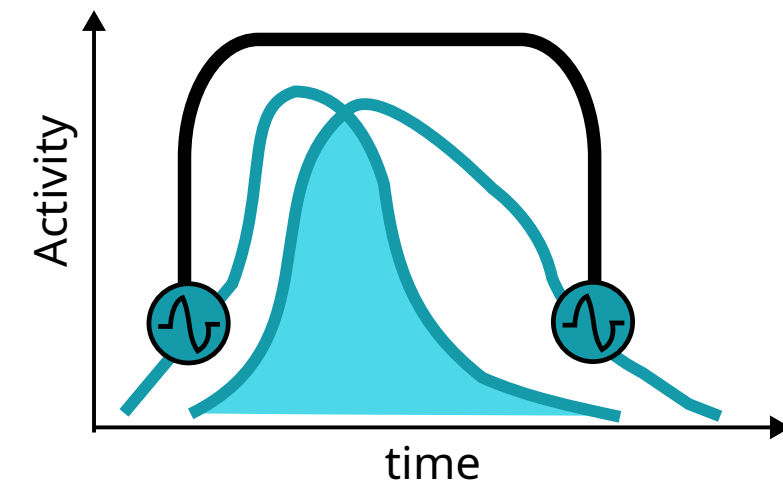
Complex system
composed of
many units



Dependence of these
states on an
external signal



Asynchronous
response
to external signal



Homophily -
similar elements
are coupled together

B-F Ring network models

Configuration

Interaction function

Network visualization

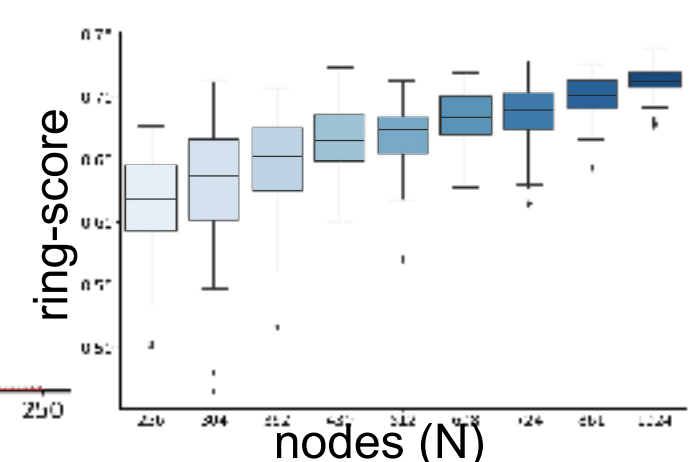
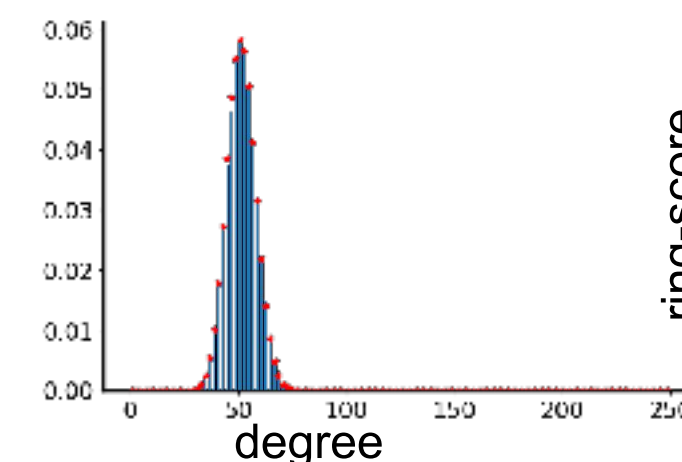
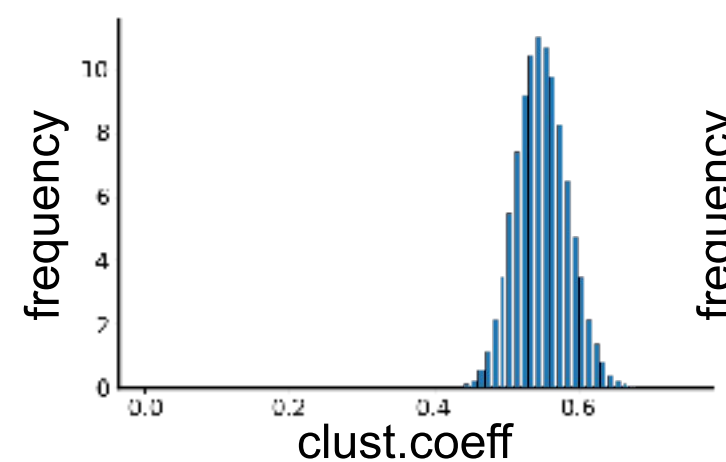
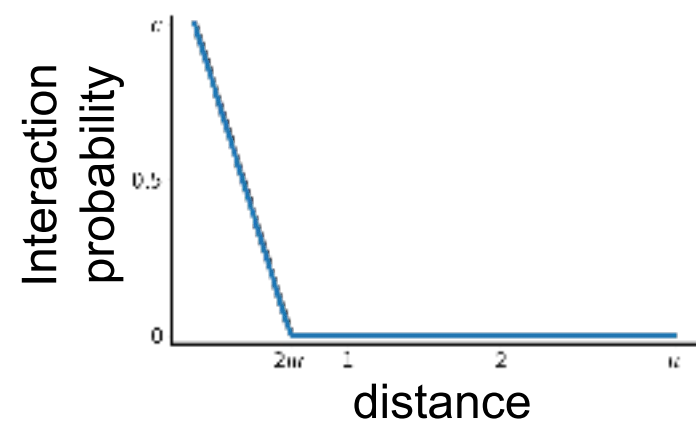
Clustering Coefficients

Degree Distribution

ring-score

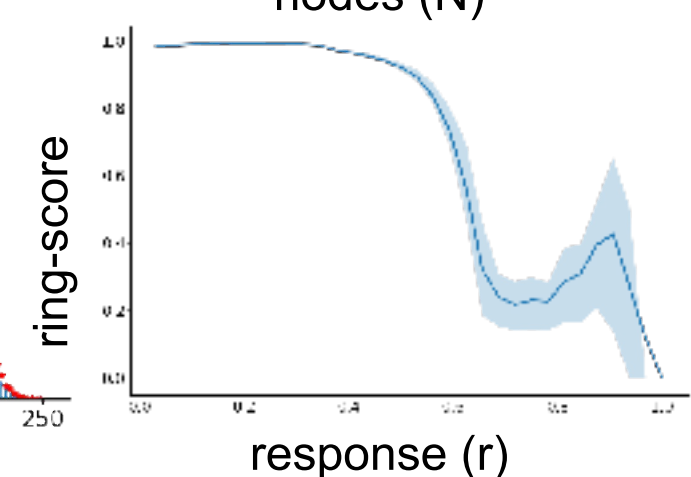
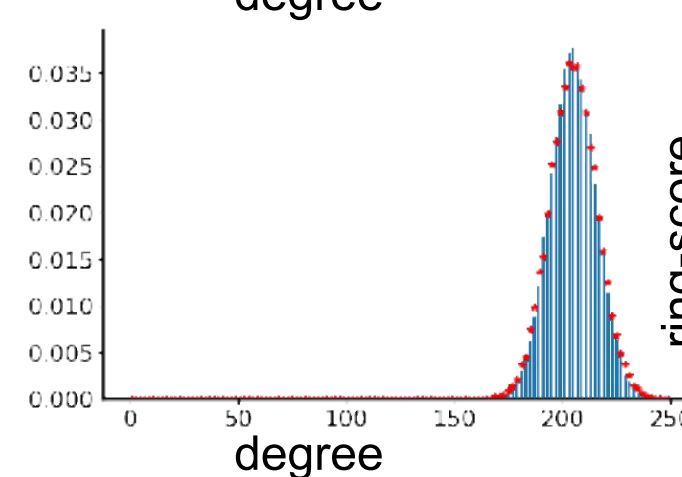
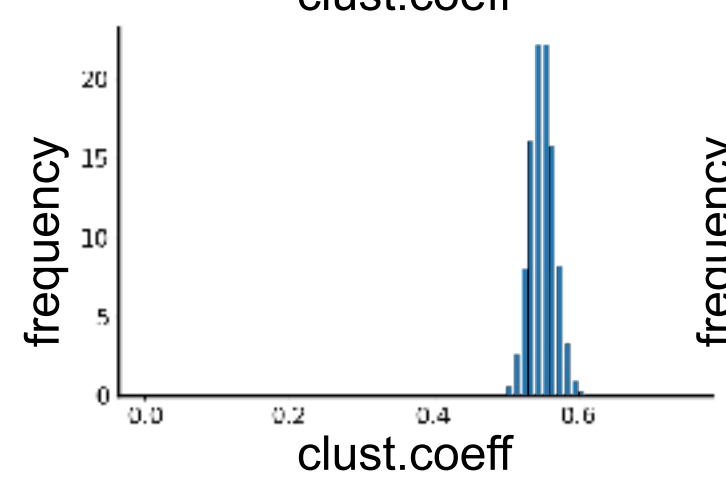
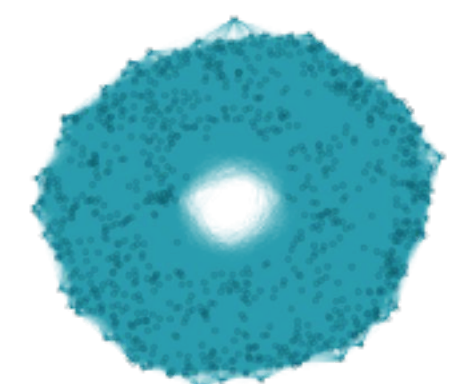
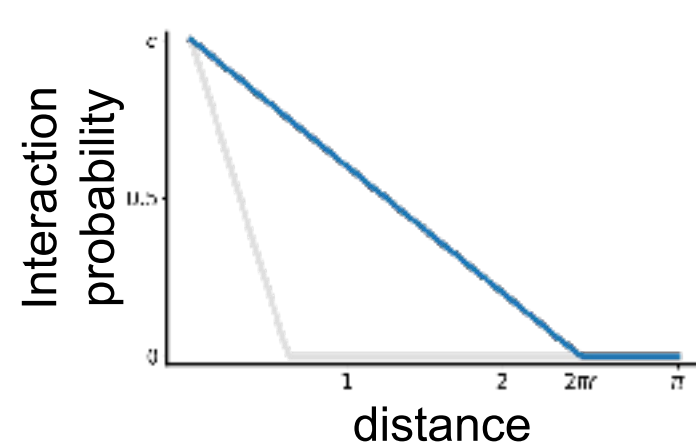
B Default model

$c = 1.00$
 $r = 0.10$
 $\beta = 1.00$
 $\rho = 0.100$
score = 0.988



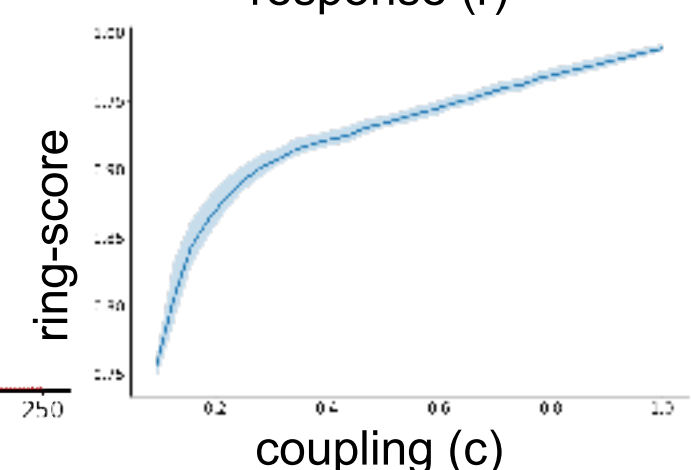
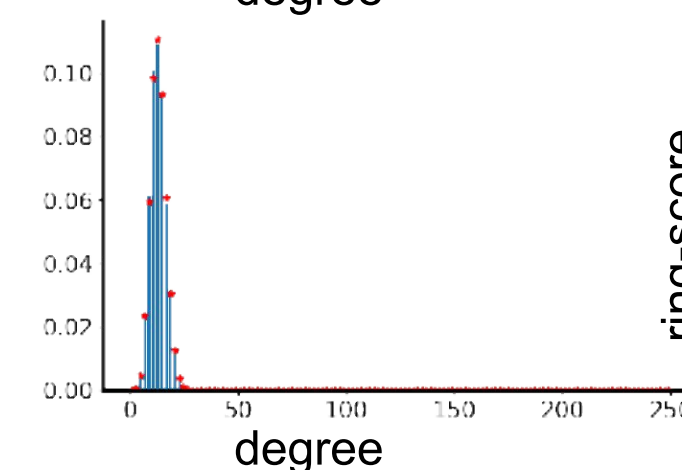
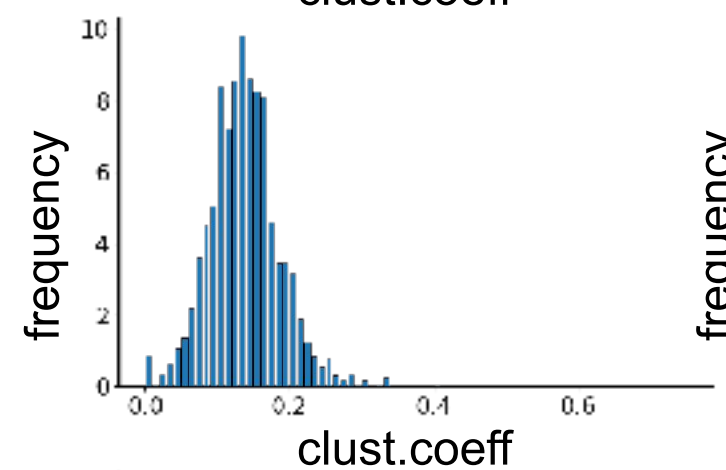
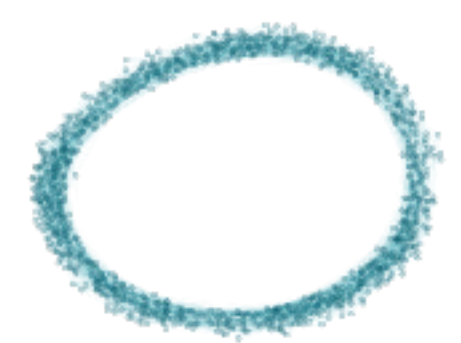
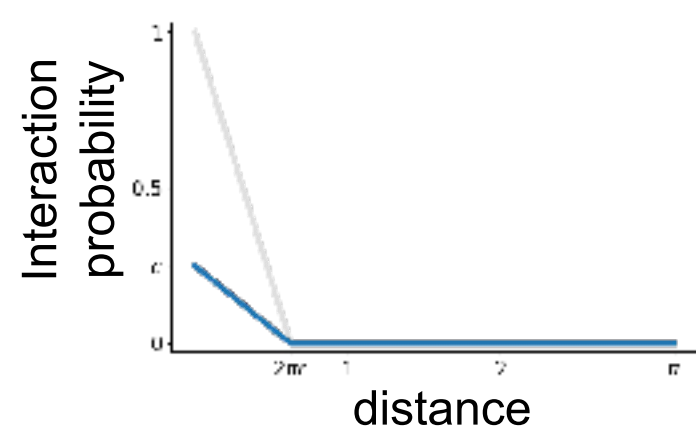
C Longer response

$c = 1.00$
 $r = 0.40$
 $\beta = 1.00$
 $\rho = 0.400$
score = 0.965



D Weaker coupling

$c = 0.25$
 $r = 0.10$
 $\beta = 1.00$
 $\rho = 0.025$
score = 0.892



E Shorter delay

$c = 1.00$
 $r = 0.10$
 $\beta = 0.75$
 $\rho = 0.158$
score = 0.840

