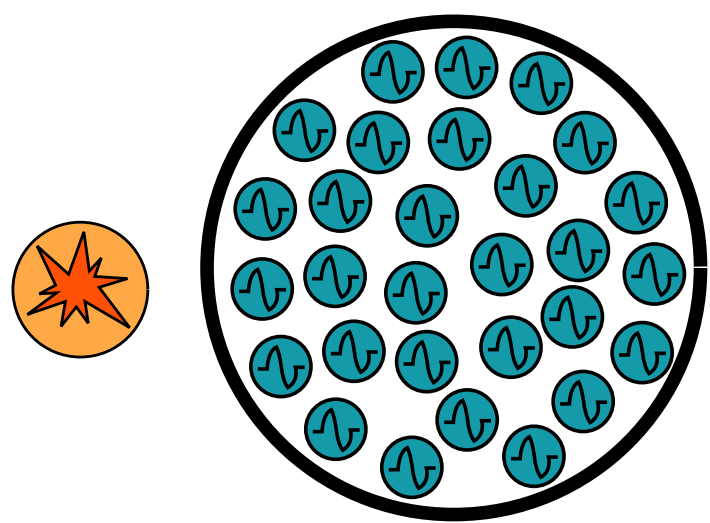
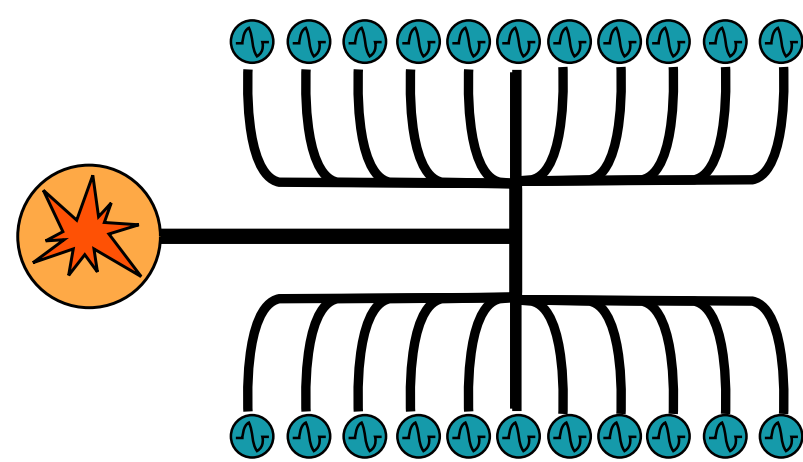


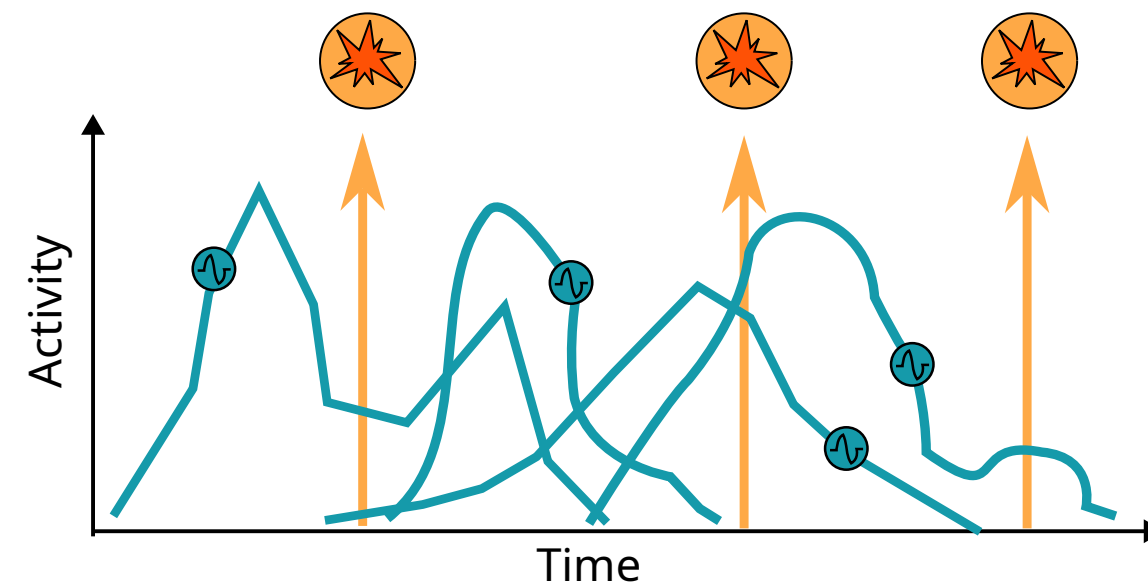
# A Basic system characteristics for the emergence of global ring structure.



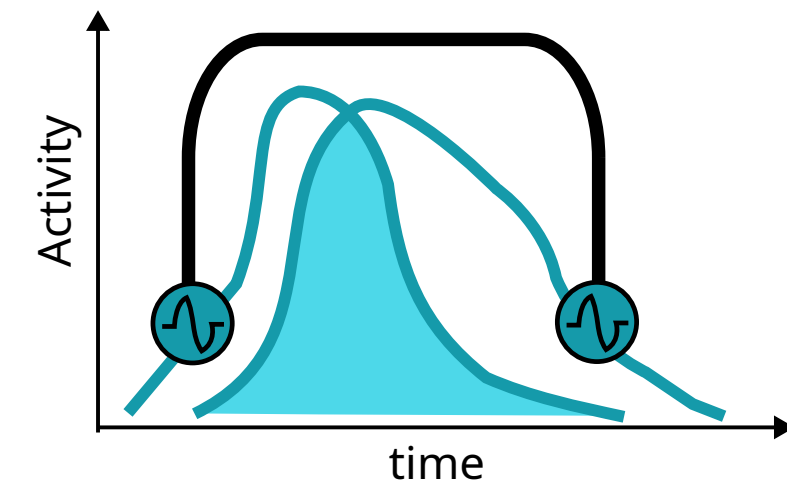
Complex system  
composed of  
many units



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

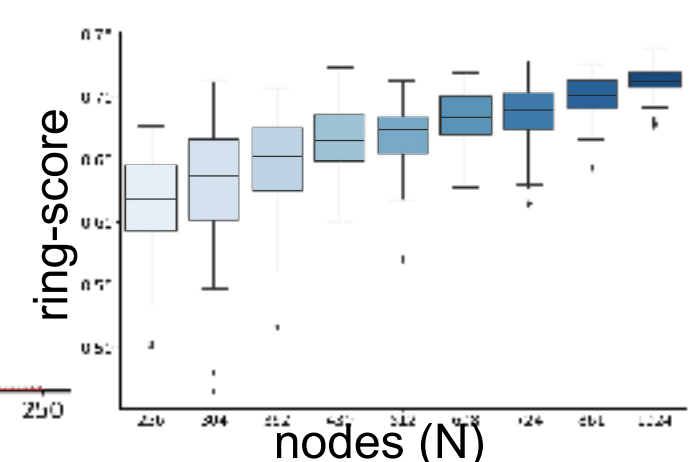
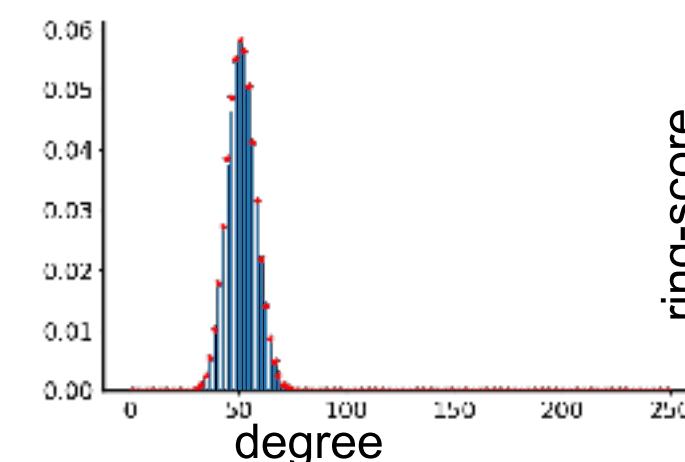
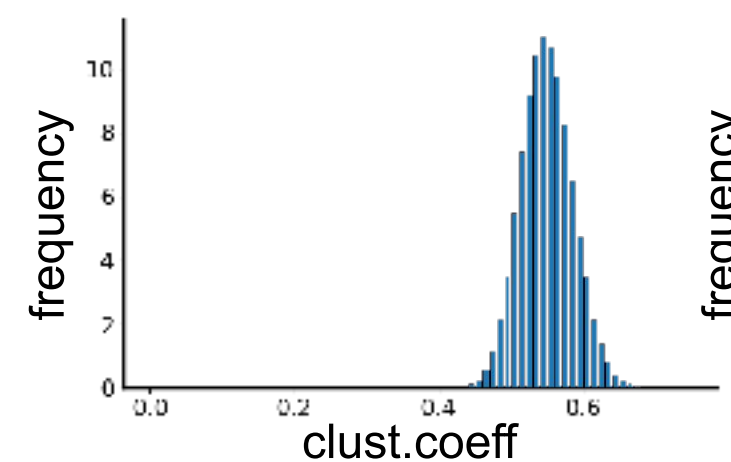
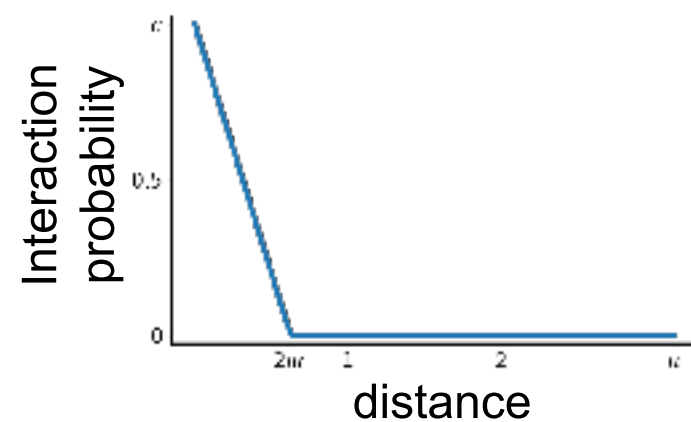
### Clustering Coefficients

### Degree Distribution

### ring-score

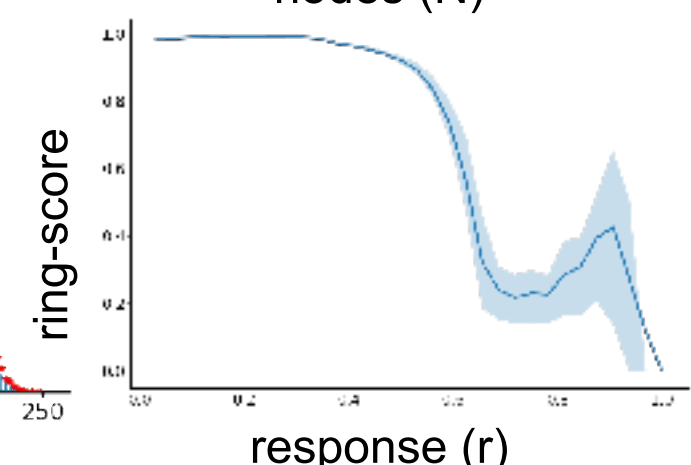
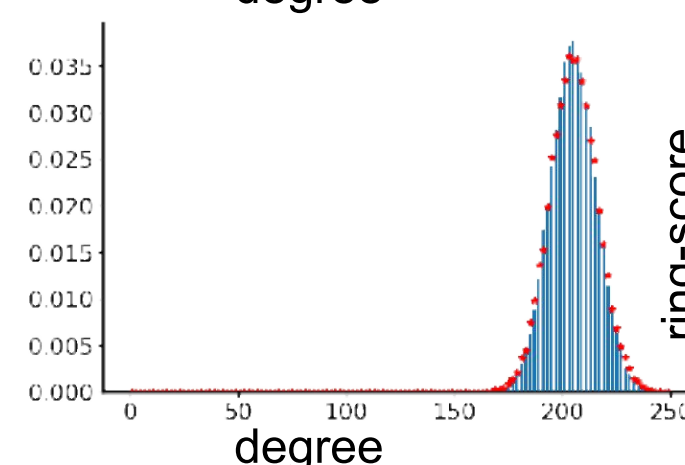
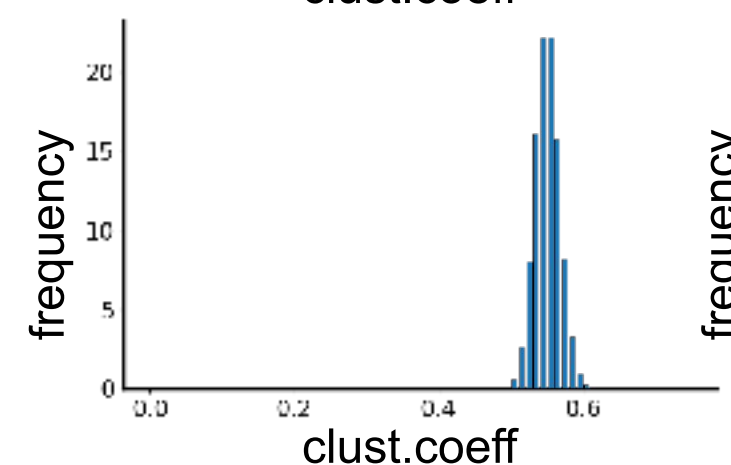
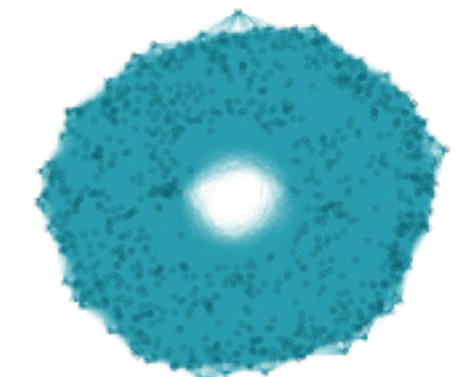
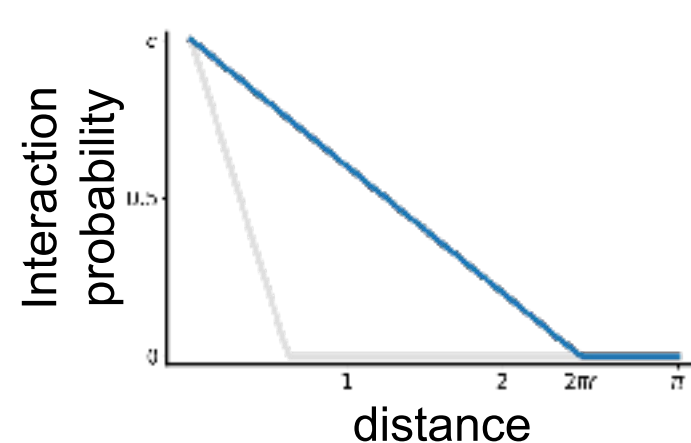
#### B Default model

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



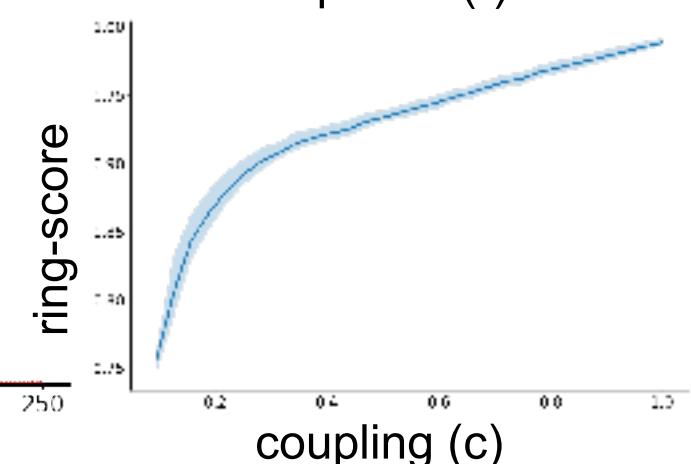
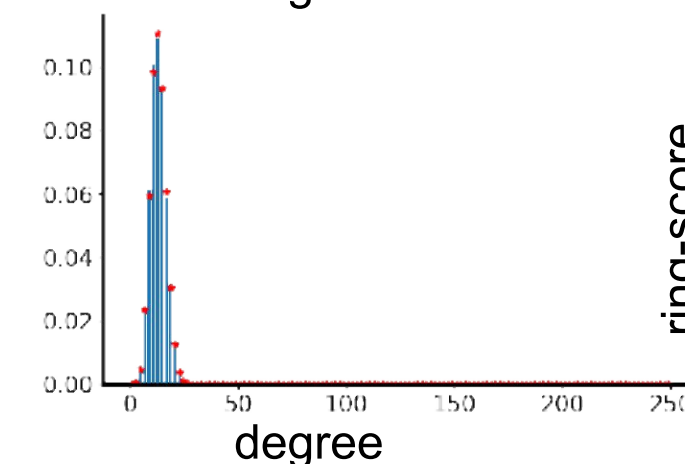
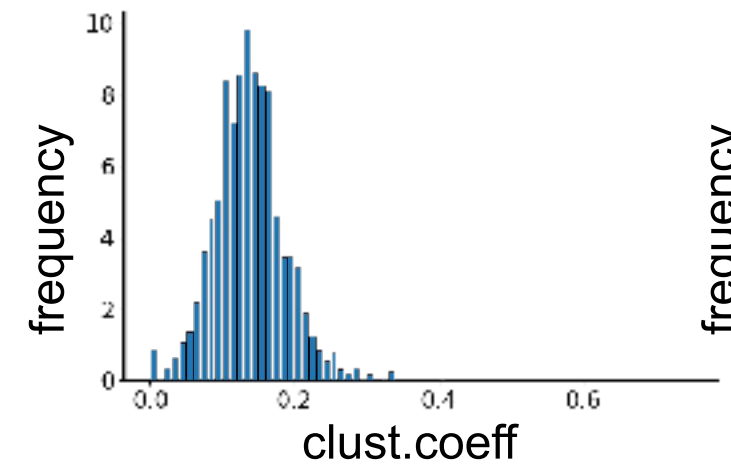
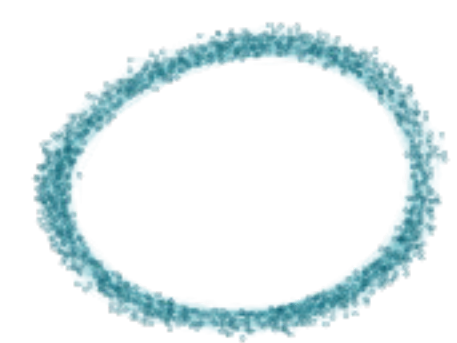
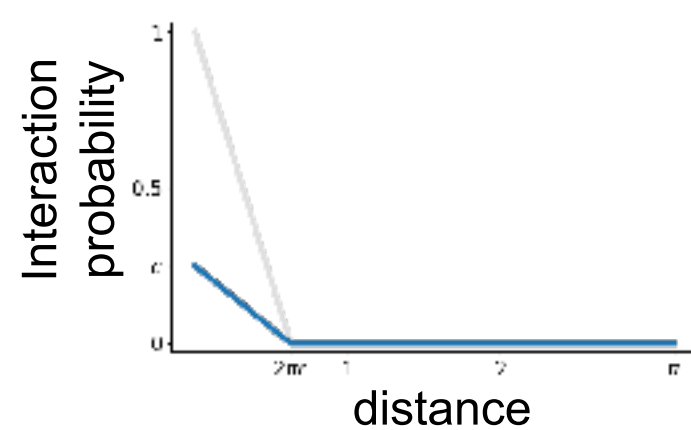
#### C Longer response

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

