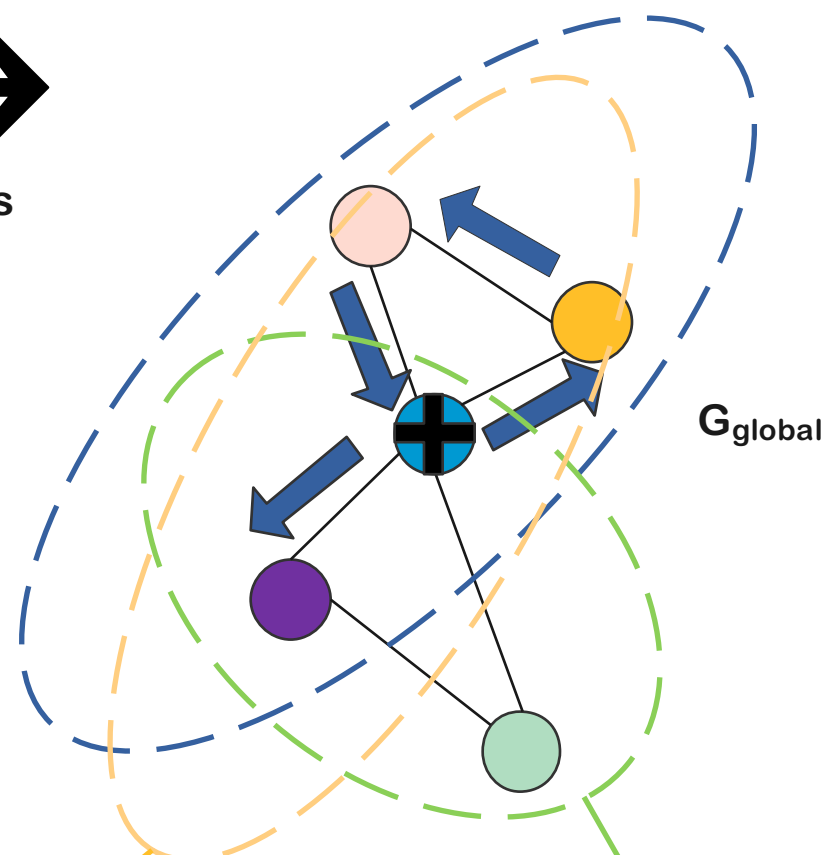


**r-ego  
networks  
with r=1**



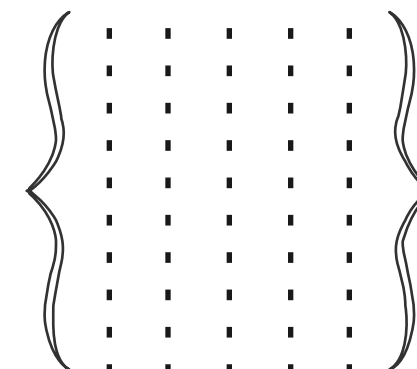
+

denoting ego node for  
starting random walk



denoting random walk  
movements

Embedding matrix  
GlobalEmb



A

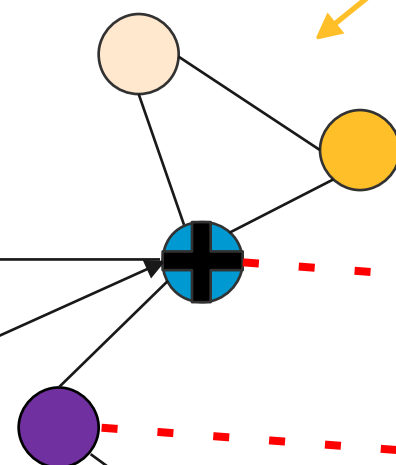
0	1	1	1
1	0	1	0
1	1	0	0
1	0	0	0

A'

0	1	1
1	0	1
1	1	0

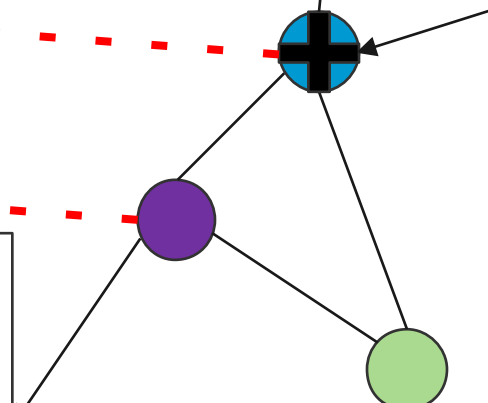
LapEmb of node =  
(0.612,0.289,0)

G



LapEmb of node =  
(0.578,-0.707,-0.707)

G'



**Align** embeddings of the  
same node in G,G'.  
Note that E is not equal  
to E'. Thus, they must be  
aligned together,  
potentially via a global  
embedding.