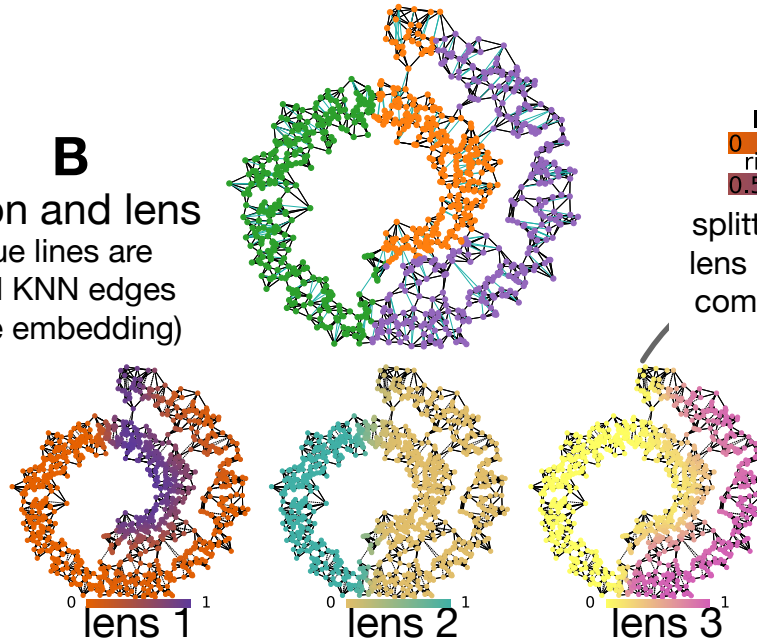
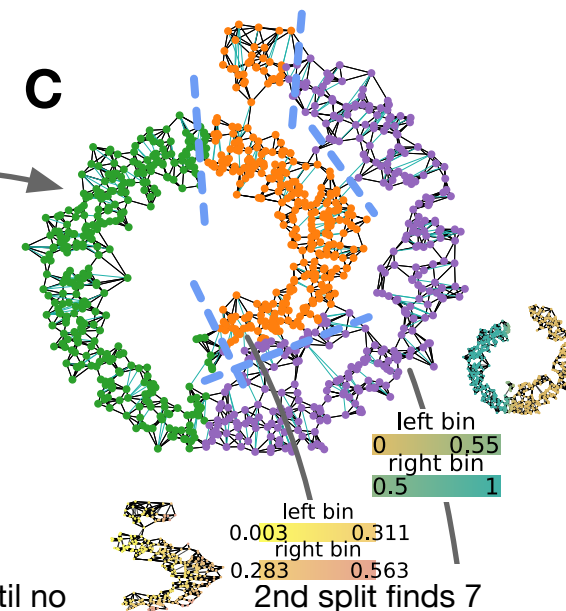


3 class Swiss Roll

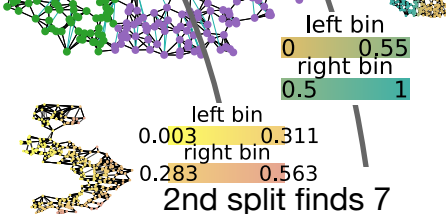
**B**  
prediction and lens  
(light blue lines are  
additional KNN edges  
from node embedding)



left bin  
0 0.55  
right bin  
0.5 1  
splitting over  
lens 1 finds 2  
components

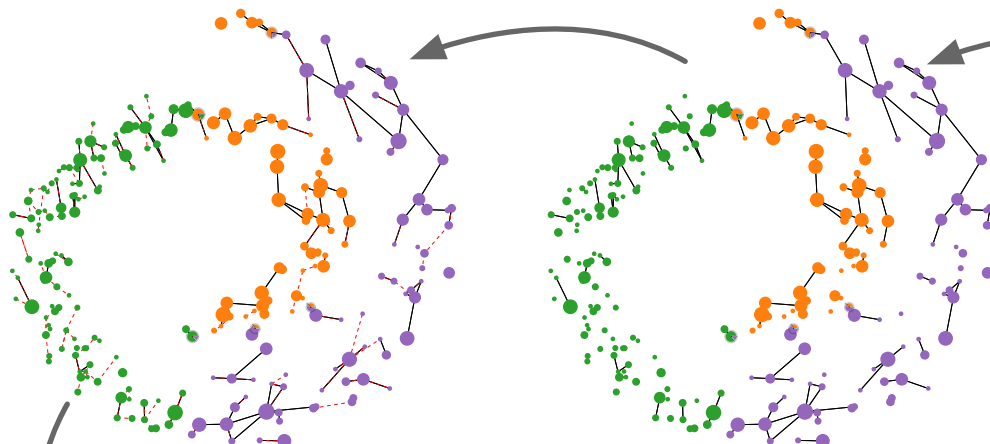


split until no  
component  
larger than 20



**E** merging small  
nodes

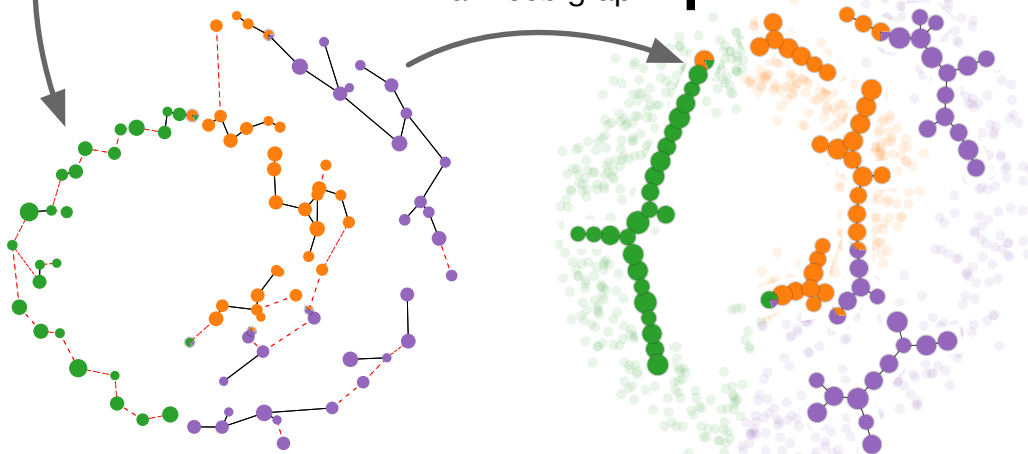
**D** initial Reeb graph



merging small  
components

final Reeb graph

**F**



**G** two Reeb graphs from original TDA with  
10 bins or 5 bins along each len

