

# Delaunay Triangulation

Construction

- Evolution By Edge Flipping

求之不得，寤寐思服

悠哉悠哉，辗转反侧

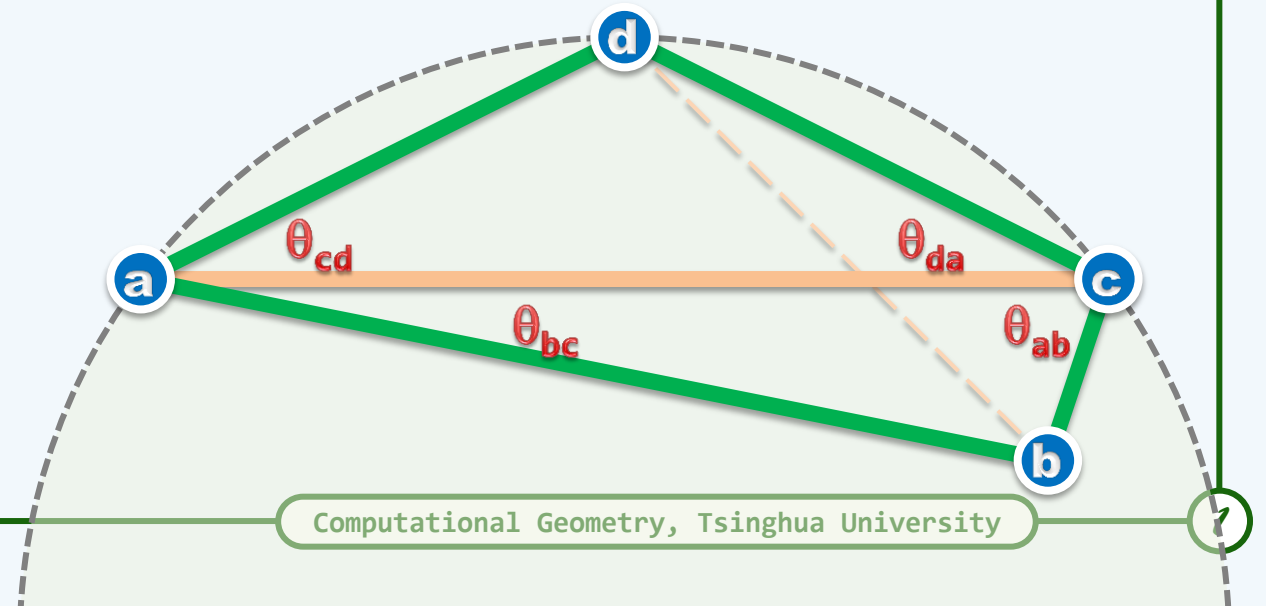
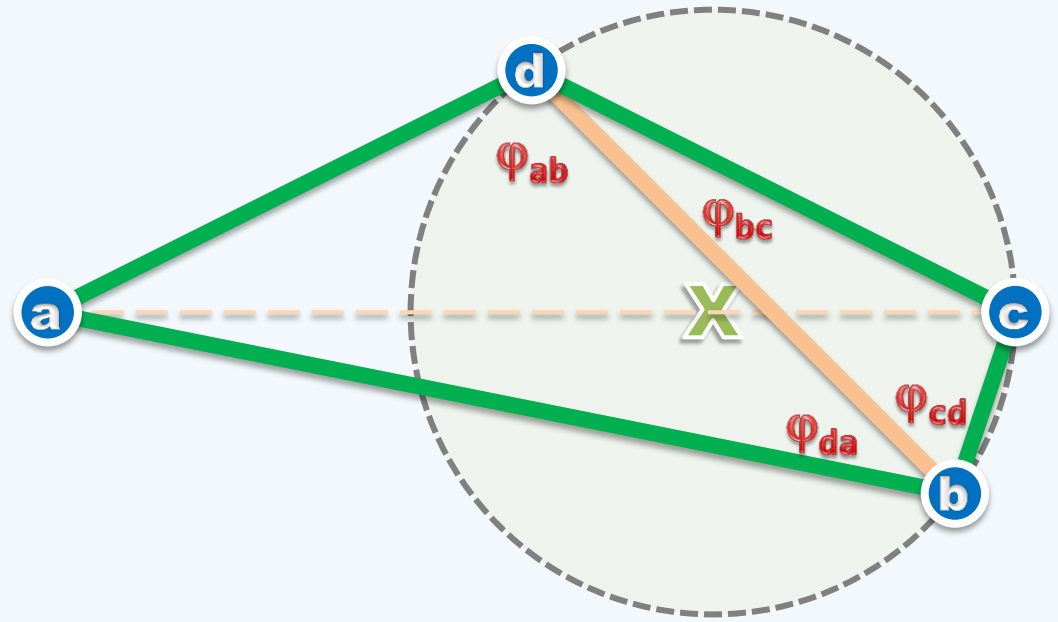
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## Edge Flipping

❖ For any triangulation  
that fails to satisfy  
the empty circle property ...

❖ We replace diagonal `ac`  
with `bd`



## Evolution

❖ After the flip operation, we have

$$\theta_{ab} < \varphi_{ab}$$

$$\theta_{bc} < \varphi_{bc}$$

$$\theta_{cd} < \varphi_{cd}$$

$$\theta_{da} < \varphi_{da}$$

❖ There should be 6 pairs  
Where are the other 2?

