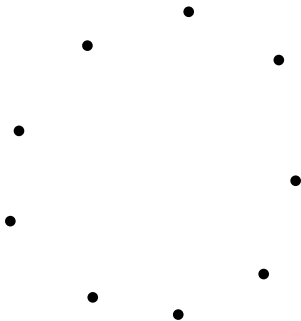


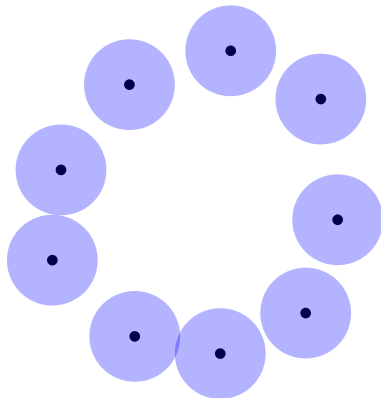
Persistent homology

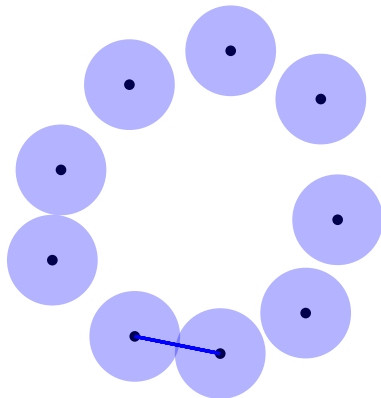
Lecture 1

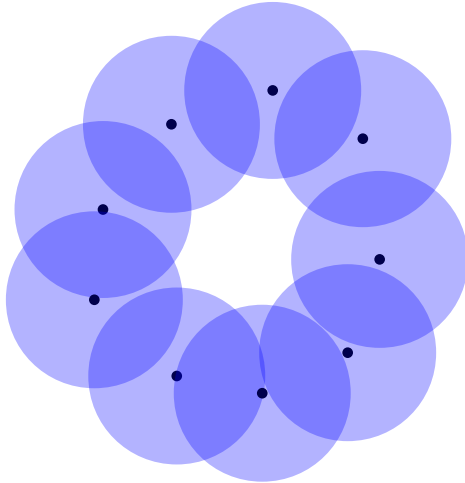
Mikael Vejdemo-Johansson

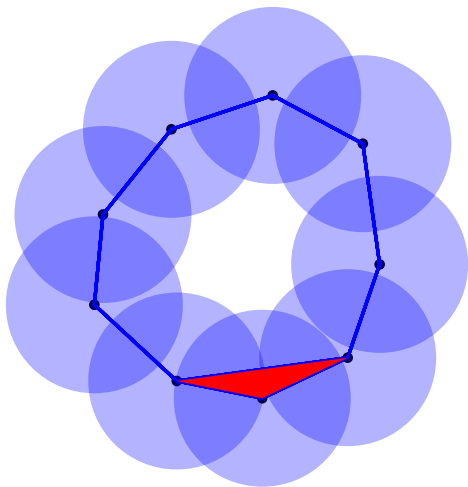
September 2, 2010

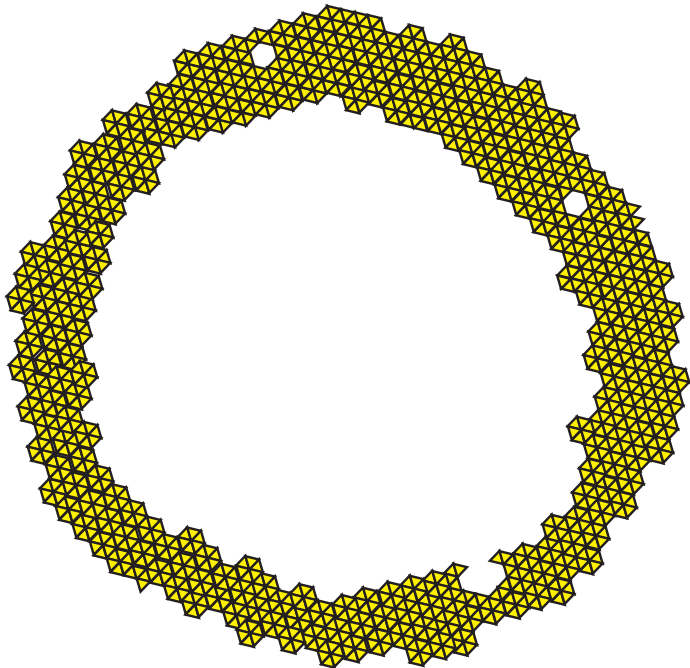


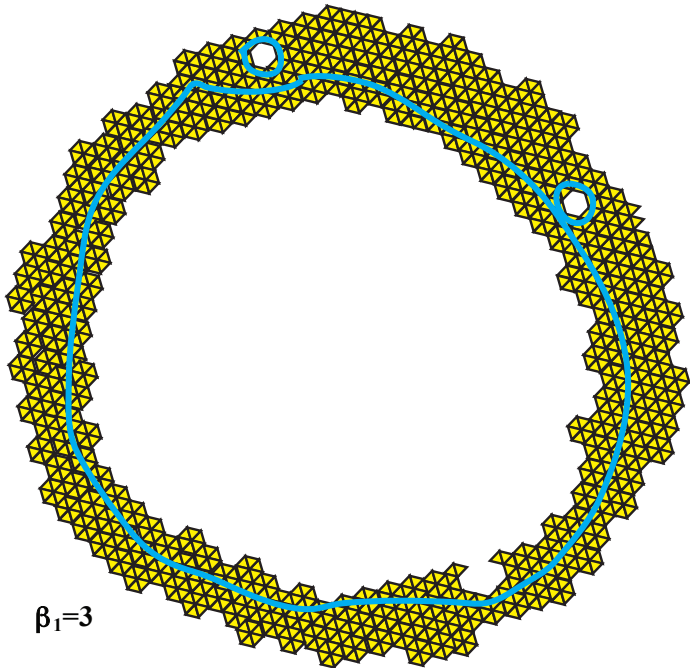




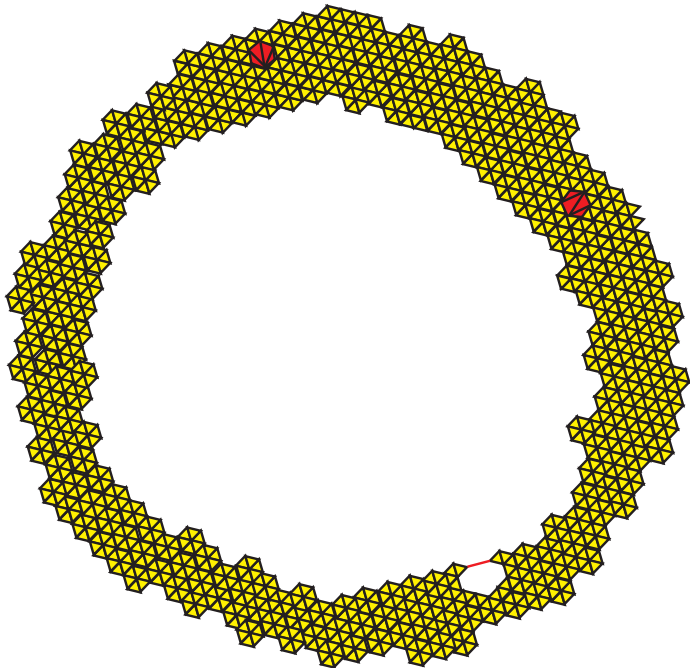


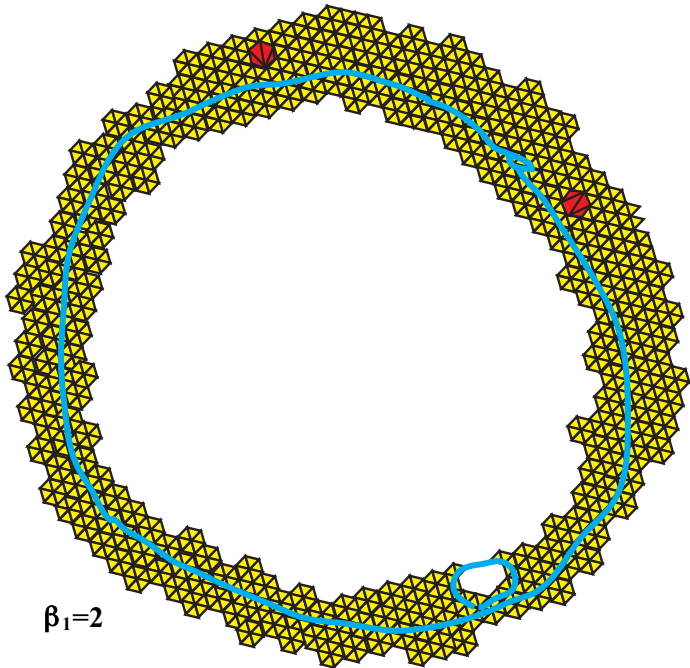






$\beta_1=3$





$\beta_1=2$

