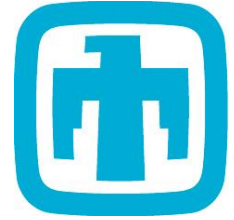# Steiner Point Reduction
in Planar Delaunay Meshes
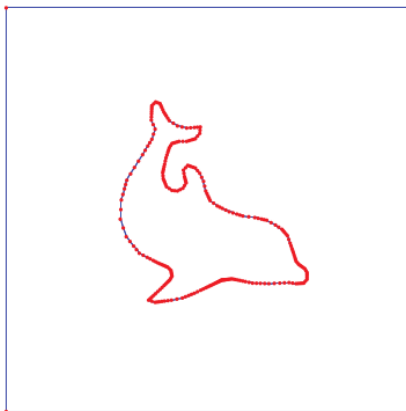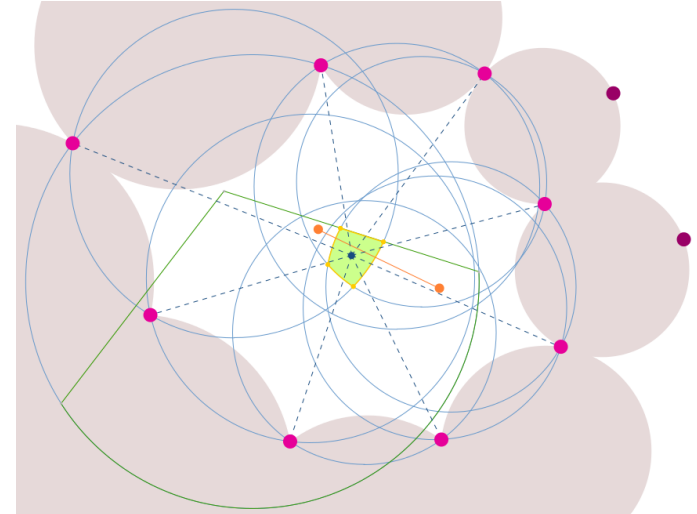
Ahmed Abdelkader[*], Scott A. Mitchell[†], Mohamed S. Ebeida[†]
[*] **Department of Computer Science, University of Maryland**
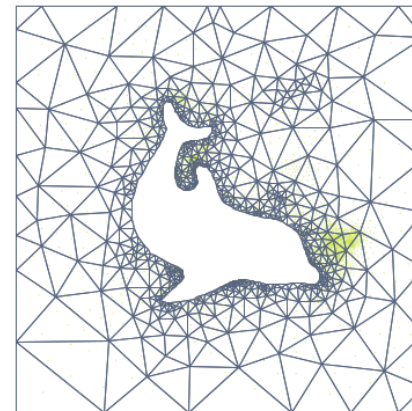[†] **Sandia National Laboratories**

- **Goal: reduce the number of points while retaining the angle bounds.**
- **Local update strategy (Sifting)**
  - **Remove 2 points**
  - **Constrain sampling region**
    - **Neighbor Circumcircles**
    - **Angle bounds**
  - **Pick a replacement point**
- **Example: 78% reduction**

Input Model

DR Mesh

Sifted Mesh