

Delaunay Triangulation

Euclidean Minimum Spanning Tree

- Construction

Junhui DENG

deng@tsinghua.edu.cn

❖ Typical MST algorithms

don't compute EMST(S) efficiently

- Kruskal's presorting needs

$$\mathcal{O}(e \log e) = \mathcal{O}(n^2 \log n) \text{ time}$$

- Using (d=n)-heaps, Prim runs in

$$\mathcal{O}(e) = \mathcal{O}(n^2) \text{ time}$$

❖ One of the efficient methods is

based on Delaunay triangulation ...

