

# Voronoi Diagram

Incremental Construction

- Royal Garden

Junhui DENG

水木清华，为一时之繁囿胜地

[deng@tsinghua.edu.cn](mailto:deng@tsinghua.edu.cn)

## Idea

❖ For any given set  $S = \{ p_1, \dots, p_n \}$

let  $S_k = \{ p_1, \dots, p_k \}$  for  $k = 1, 2, \dots, n$



❖ This algorithm computes a series of VDs:

$$VD(S_1), VD(S_2), VD(S_3), \dots, VD(S_n) = VD(S)$$

$$VD(S_{k-1}) \rightarrow VD(S_k)$$

