

Voronoi Diagram

VD_{sorted}

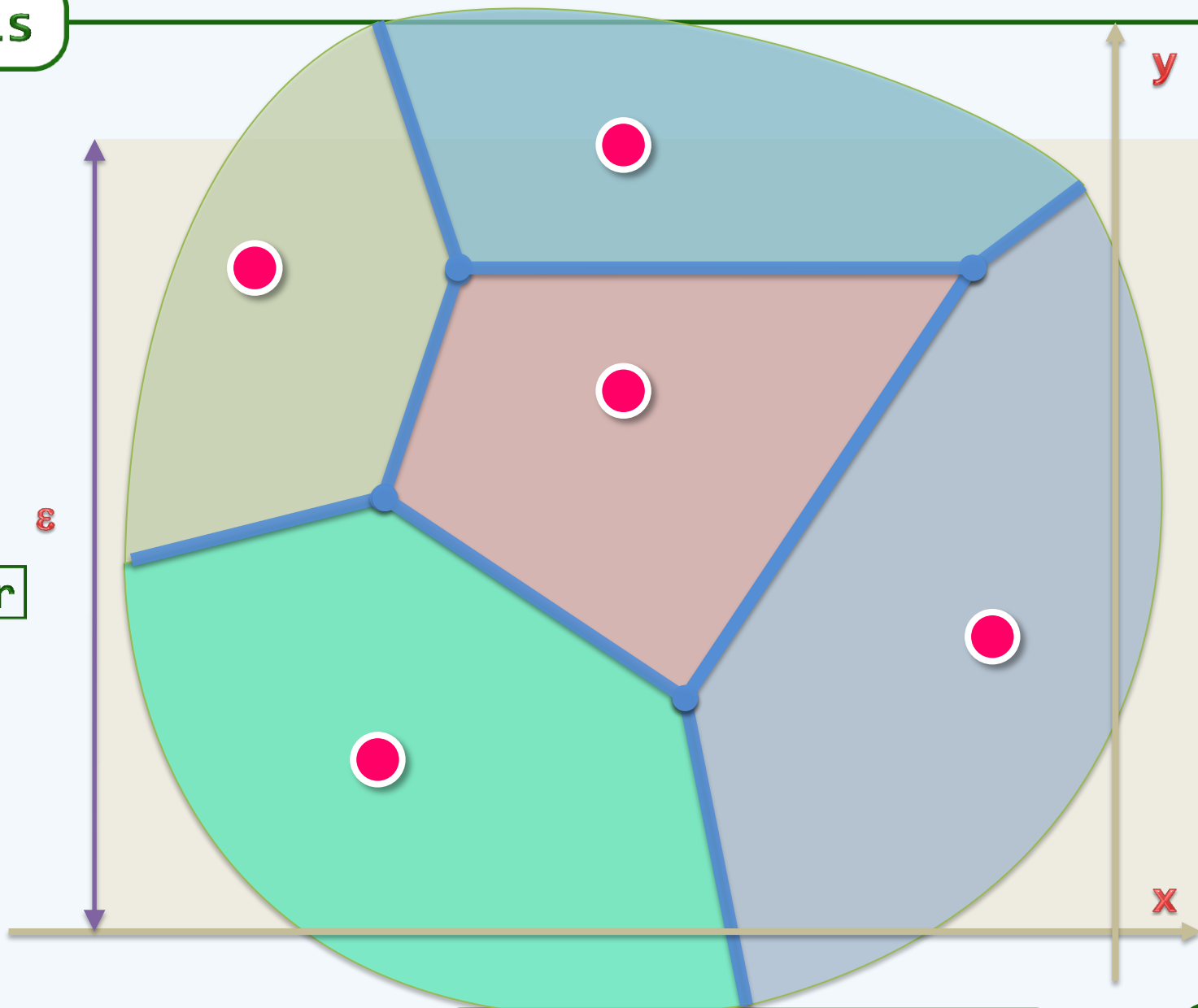
- Projection

Junhui DENG

deng@tsinghua.edu.cn

Stabbing With x-Axis

- ❖ Suppose that
VD(S) is constructed
by any algorithm
- ❖ If VD(S) is represented
as a DCEL,
we can enumerate in order
all cells intersecting
with the x-axis
- ❖ And this can be done
in $O(n)$ time //how?



- ❖ Now, consider the projection of the points back onto the x-axis i.e. the input reals

x_1, \dots, x_n

- ❖ There would be 2 cases, depending on...

- ❖ whether or not

every x_i lies in $\text{Cell}(p_i)$

