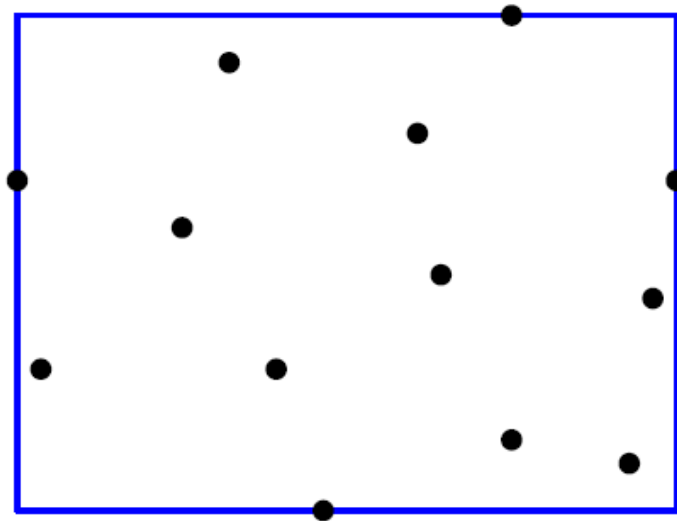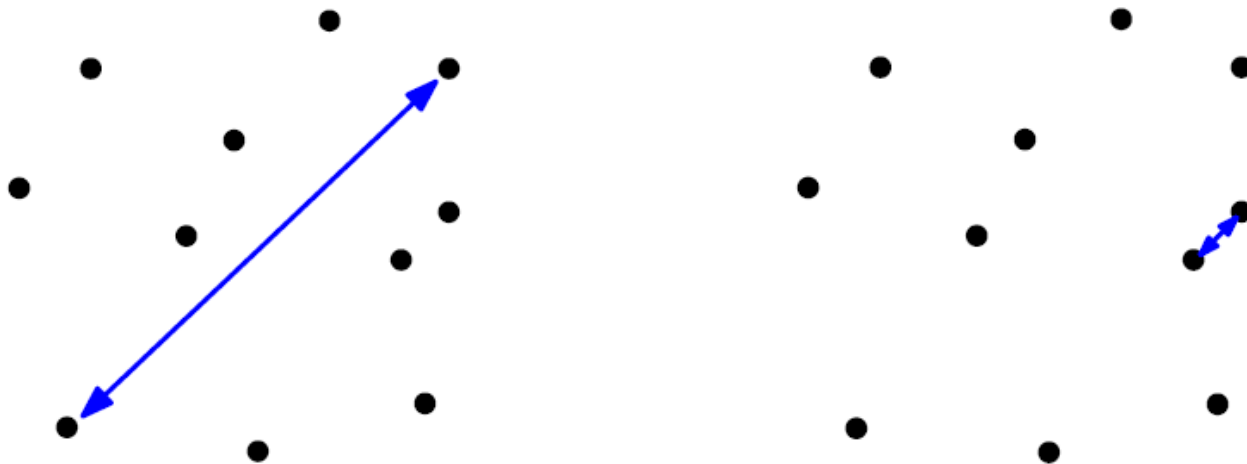# Minimum Axis-parallel Bounding Box

- Problem: Given a set of total n points in the plane, can we efficiently compute the minimum axis-parallel bounding box by randomized incremental construction?
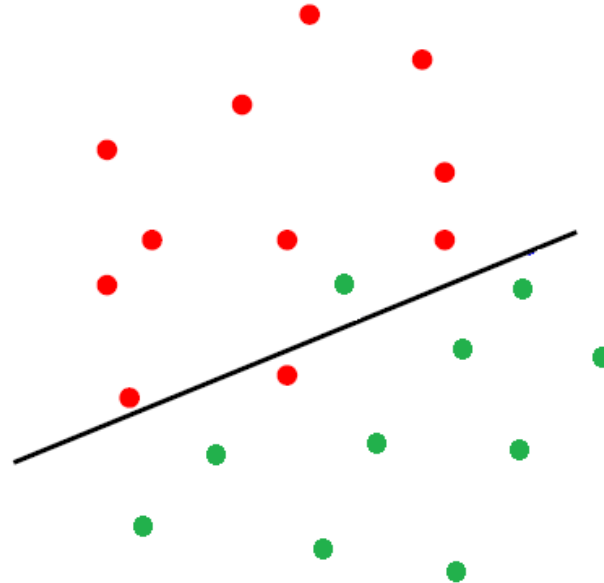
Furthest Pair and Closest Pair

- Problem: Given a set of n points in the plane, compute efficiently the two points furthest apart; compute the two points closest together.

Red-green Points Separation

- Problem: Given a set of total n red and green points in the plane, can we decide efficiently with randomized incremental construction way if they have a separating line?

Disks Overlapping

- Problem: Given n disks in the plane, can we compute the lowest point in their common intersection efficiently by randomized incremental construction? can we compute the lowest point in their union efficiently by randomized incremental construction?