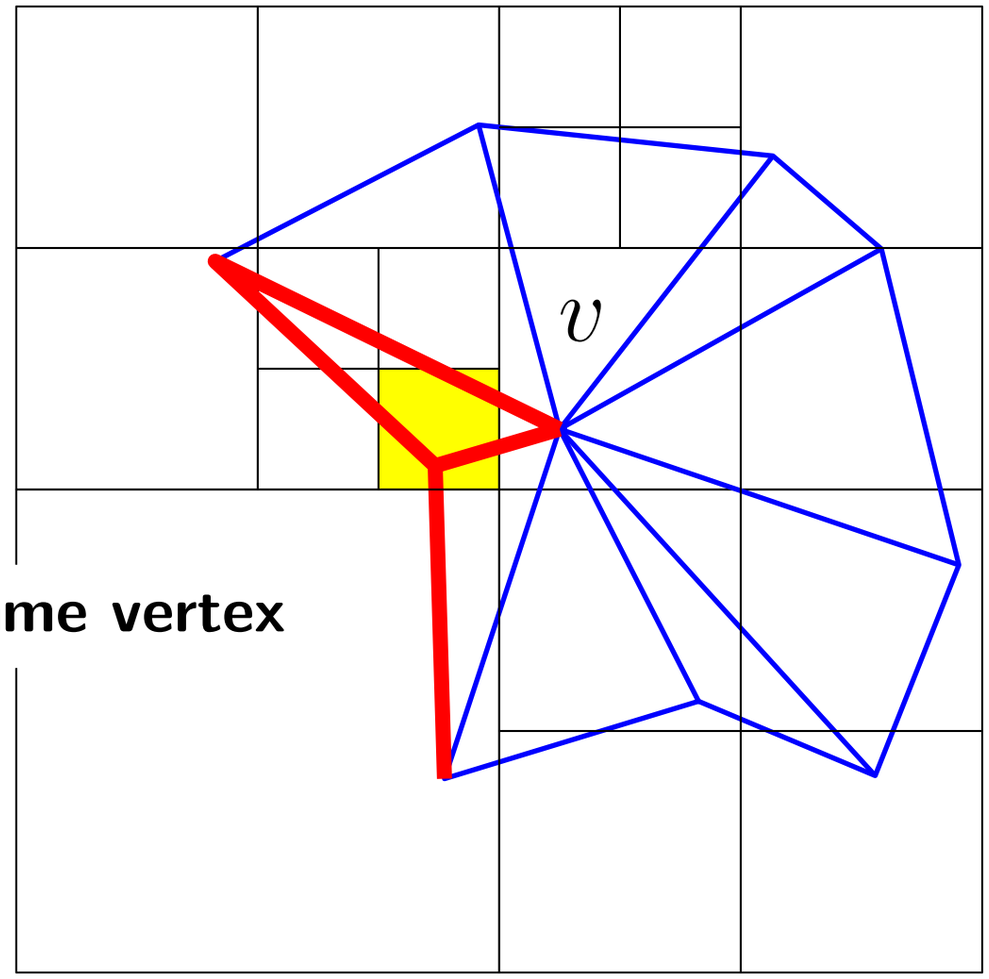
How to get that quadtree in Z-order (for triangulations of unit square)

Input: file with for each vertex its adjacency list.

Algorithm:

1. For each vertex v:
   - load adjacency list in memory;
   - build quadtree on $star(v)$ with splitting criterion:

     Stop splitting when all edges incident to same vertex