

## Pairwise Triangles Intersections in a Query Rectangle



- Homothetic Triangles
- **Problem:** Given a set of homothetic right-angled triangles, find all pairs of triangles intersecting in a query rectangle.
- Present a solution with  $O(n \log n)$  space and  $O(\log n + k)$  query time.
- categorize the required pairs into five configurations.
- design a data structure for each configuration.