

## Fast Construction of Inter-Object Spacing Representations

- 1) The main contribution of our paper is that of a parallel algorithm that constructs quadtrees that resolve between objects. The algorithm is both parallel and adaptive, so object spacings can be non-uniform and very small compared to the domain.
- 2) We build on a serial version of the algorithm: Edwards J, Daniel E, Pascucci V, Bajaj C. Approximating the generalized voronoi diagram of closely spaced objects. Computer Graphics Forum 2015;34(2):299–309.
- 3) Our algorithm is parallel and an order of magnitude faster than prior state of the art.