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MADALGO seminar by Casper Kejlberg-Rasmussen, Aarhus University

K-order Voronoi Diagrams in External Memory

Abstract:

The *k*-order Voronoi diagram of a set of *n* sites *S* is a subdivision of R^d into a collection of convex cells, where every point in the interior of each *d*-face has the same *k* nearest sites.

As I am in the early stages of my research, this talk will be devoted to defining the problem, showing the best known solution in the RAM model, which uses random incremental construction. Then I will cover known techniques to do random incremental construction in external memory by use of gradations and sampling.