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MADALGO seminar by Morten Revsbæk, Aarhus University

I/O-efficient Contour Tree Simplification

Abstract:

In this talk we present an I/O-efficient version of an algorithm for simplifying contour trees of two- and three-dimensional scalar fields described by Carr et al. Our algorithm uses optimal $O(\text{sort}(N))$ I/Os where N is the size of the contour tree. Like the algorithm of Carr et al. our algorithm can perform the simplification based on a number of local geometric measures associated with the individual contours.

Joint work with: Lars Arge