# Fast sweeping method for convex Hamilton-Jacobi equations

Hongkai Zhao
Mathematics, UC Irvine
zhao@math.uci.edu

**Abstract**

I will present an efficient iterative method, the fast sweeping method, for computing the numerical solution of general static convex HJ equations on both structured and unstructured meshs. Convergence, erro estimate and optimal complexity will be shown. Applications to travel time computationsw will be discussed.