

Introduction to the Fast Multipole Method

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Numerical simulation of the n-body problem entails computing all pairwise gravitational forces after every time step. The fast multipole method is a way of effecting this calculation at a much lower computation cost.

Location and Time

Engineering II 2319 ME conference room @ 6pm

Pre-requisites

Freshman calculus

Reference

Beatson R, Greengard L. A short course on fast multipole methods. Wavelets, multilevel methods and elliptic PDEs. 1997; 1:1-37.

