LABORATORY FOR COMPUTER SCIENCE

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PHYSICS OF COMPUTATION SEMINAR

Date: Wednesday, November 9, 1994
Time: Refreshments at 4:00pm
Talk at **4:15pm**
Place: 37-252 (Marlar Lounge)

Hydrodynamics, Interfaces, and Lattice Gases

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Lattice gases simulate fluid flows with a simplified molecular dynamics in which point particles move synchronously on a regular lattice and obey conservation laws during their collisions on the nodes of the lattice. These models have been proven to be an effective tool for the simulation of flows at low to moderate Reynolds numbers. There is particular interest in the application of lattice gases to the study of flows through complex geometries or with interfaces. After a description of some generic models, I shall present new results in the analysis of boundary conditions and interfaces in lattice gases and related Boltzmann equations.

Host: Dan Rothman

This talk is part of a seminar series on adapting computers and computations to the constraints of, and opportunities afforded by, microphysics; and on the development and application of the physical theory of computation and information. If you would like to receive electronic notice of these seminars, send email to "poc@im.lcs.mit.edu."