Abstract

Haskell is a modern, lazy, pure functional language. The first part of the talk will describe some of the features of functional languages, and Haskell in particular. The array facilities of Haskell will be introduced. The second part of the talk will describe Haskell implementations of three "scientific" algorithms. In order of increasing complexity they are: relaxation for the Poisson equation, Monte Carlo simulation of the XY model, and simulation of a lattice gauge theory.