AVVISO DI SEMINARIO

Lunedì, 20 ottobre 2014, ore 14.00

Sala Garisenda – INFN-CNAF

Via Ranzani, 13/2, Bologna

Tim Mattson (Intel)

Programming Extreme Scale Computers

Abstract

We've all heard the projections of what we can expect from exascale computers. Huge numbers of processors, aggressive engineering to minimize energy consumption, and unreliability at the component level will make programming these machines a difficult challenge.

In this talk, we will describe the issues raised by exascale systems and the types of programming models that should be available for working with these machines.

Tim Mattson is a principle engineer in Intel's Microprocessor and Programming Research laboratory. He is an old fashioned application programmer with experience in quantum chemistry, seismic signal processing, and molecular modeling and has used more parallel programming models than he can keep track of. Tim was part of the teams that created OpenMP and OpenCL. Most recently, he has been working on the memory and execution models for the next major revision of OpenCL. Tim has published extensively including the books Patterns for Parallel Programming, An Introduction to Concurrency in Programming Languages, and the OpenCL Programming Guide.

Per informazioni: francesco.giacomini at cnaf.infn.it