

4th Latin American SCAT Workshop

Facultad de Ciencias Físicas y Matemáticas

Universidad de Chile

Satellite School on Numerical Methods — 29 Sept. to 3 Oct. 2008

Parallel Scientific Programming



Lecturer:

Dr Mike Ashworth, Head of the Advanced Research Computing Group
Daresbury Laboratory, United Kingdom

Duration

4 hours.

Description

The exploitation of high-performance parallel computers has become an indispensable tool for making progress in computer simulation across a wide range of scientific disciplines. Resources cover a huge range from desktop systems, through departmental clusters up to national facilities with several thousand processors. The transition from serial programming to parallel requires the grasp of new concepts, new programming environments and a new mindset.

We shall present an introduction to the theory and practice of parallel programming through a series of short lectures coupled with practical programming sessions.

The course will cover:

- ▶ Introduction to Parallel Programming
- ▶ Parallel Architectures - Hardware & Software
- ▶ Message Passing Interface, MPI

For more information, visit www.scats-alfa.eu



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