

Final SCAT meeting and satellite school

Universidad Técnica Federico Santa María, Valparaíso

Parallel Scientific Programming



One of a series of mini-courses taking place 20-24 July 2009

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
- ▶ Fortran 90, tools, and numerical libraries

Lecturer:

Dr Andrew Sunderland, Advanced Research Computing Group
Science & Technology Facilities Council (Daresbury Laboratory), United Kingdom

This course will be in English.

For more information, email info@scat-alfa.eu or visit www.scat-alfa.eu