



# Euro-Par 2006

## Dresden, Germany

29th August - 1st September 2006

### Workshop in conjunction with Euro-Par 2006

#### **Intel® Cluster OpenMP\***

James Cownie

28.08.2006, 14:00, Room 403

Cluster OpenMP provides users with a cost-effective way to use many processors for running a single program. The old wisdom gave users two choices for doing this: MPI on a cluster, or OpenMP on a large shared memory machine. Cluster OpenMP provides the best of both worlds: a less expensive programming model on a less expensive hardware platform: OpenMP on a cluster.

This half day tutorial will provide

- A short introduction to OpenMP
- Cluster OpenMP concepts and the changes to an OpenMP code required to port it to Cluster OpenMP
- Cluster OpenMP porting techniques and tools
- Cluster OpenMP performance tuning hints and tools
- Information on the performance of a variety of OpenMP benchmark codes ported to Cluster OpenMP

The tutorial should be of interest to developers and ISVs who have OpenMP codes which scale well on SMP machines and who would like to run them on cheap cluster machines, but are intimidated by the idea of ripping their code up and re-writing it in a message passing (MPI) style.

The presenter will be Jim Cownie of Intel Performance, Analysis and Tuning Lab. Jim is one of the engineers working on Cluster OpenMP. He has many years parallel programming experience having started at Inmos in 1979; he was a founder of Meiko, and a member of the HPF, MPI-1 and MPI-2 standards committees.

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