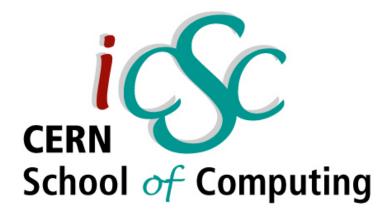- ✓ *What will tomorrow's supercomputers look like?*
- ✓ *How to port your application to GPUs (without porting it)?.*
- ✓ *What should I do to use tomorrow's supercomputers efficiently?*
- ✓ *Why thinking parallel will make all the difference?*
- ✓ *Shall we think in local or global address spaces?*
- ✓ *Do we need data stream processing to cope efficiently with many-core CPUs?*
- ✓ *What to think of the new languages … Fortress, Chapel, X10, UPC, Co-Array Fortran?*
- ✓ *Do you need to learn VHDL when using FPGAs?*
- ✓ *How to define an FPGA's peak performance? (and how to cheat doing so?)*
- ✓ *How can FPGAs running at 100MHz outperform CPUs running at 3GHz*
- ✓ *Does C-to-Hardware work?*
- ✓ *What DEISA/PRACE/HPCS mean?*
- ✓ *Can your playstation save the world?*
- ✓ *Why should supercomputers care about the climate change?*
- ✓ *Do you think Roadrunner is a bird and Maxwell is a Scottish physicist?*
- ✓ *How to improve your data analysis for better signal/background discrimination?*
- ✓ *How to use recent of data analysis techniques (Neural Network, Decision Tree,…)*

All the answers at **iCSC**

iCSC

CERN School *of* Computing

inverted CSC-2008

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3-5 March 2008, CERN*

► Towards Reconfigurable High-Performance Computing

- ✓ Multicore, advanced Architectures
- ✓ Multi-core at work
- ✓ Special-Purpose Accelerators
- ✓ Multicores at work: CELL Processor
- ✓ Programmable Logic
- ✓ Reconfigurable HPC: theory, tools
- ✓ Parallel Programming Paradigms
- ✓ Hybrid Programming

► Special topics

- ✓ Advanced aspects of data analysis
- ✓ Scalable Image and Video coding

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Lecturers
All former CSC2006/2007 students

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Jose Dana Perez — CERN

Alfio Lazzaro — University of Milan, INFN Milan

Manfred Muecke — University of Vienna

Andrzej Nowak — CERN

* IT Amphitheatre, building 31
Free attendance but registration recommended