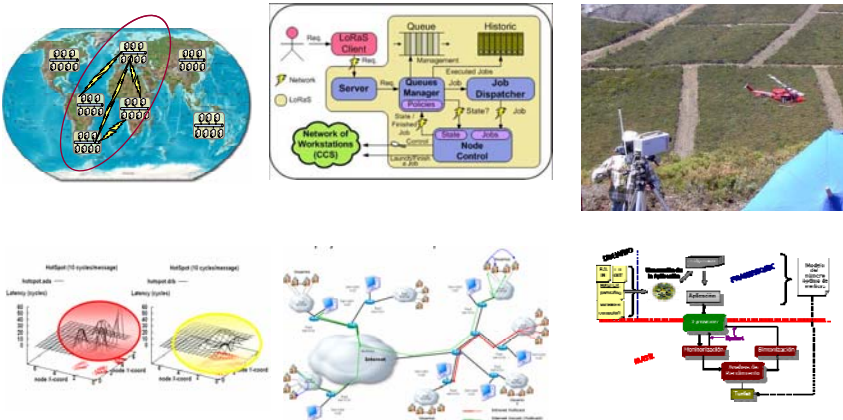
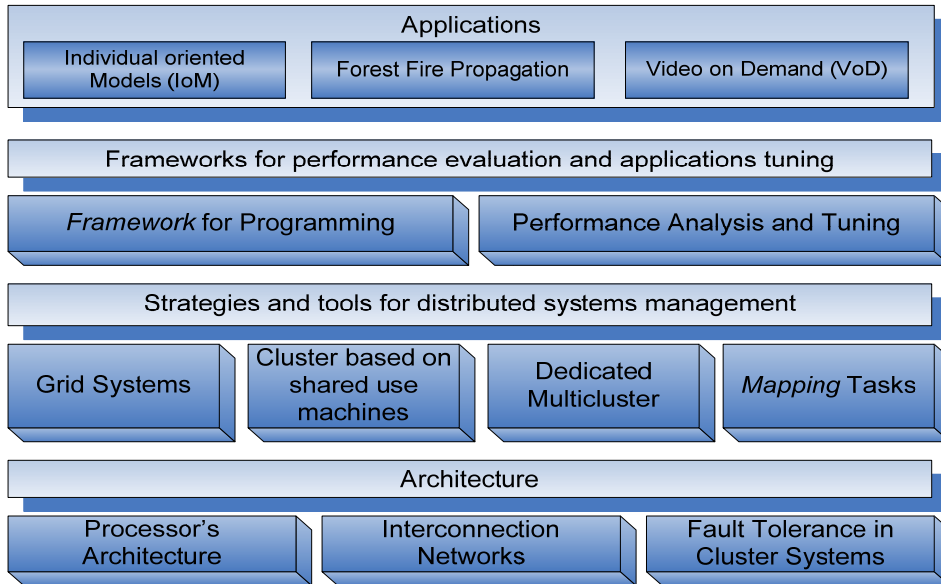


## Research Lines



## European Higher Education Area (EHEA)

*Master in High Performance Computing.*

*PhD by the UAB*

**Program precedent of the PhD with quality mention 2004**

*We believe that much can be learned by examining the success of parallelism at the extremes of the computing spectrum, namely embedded computing and high performance computing.*

*Since real world applications are naturally parallel and hardware is naturally parallel, what we need is a programming model, system software, and a supporting architecture that are naturally parallel..*

**The Landscape of Parallel Computing Research:**

**A View from Berkeley (2006)**



**UAB**  
Universitat Autònoma de Barcelona

**etse**

**More information:**

Dr. Emilio Luque

+34 93 581 1356

[Emilio.Luque@uab.es](mailto:Emilio.Luque@uab.es)

[www.caos.uab.es](http://www.caos.uab.es)

CAOS - Computer Architecture and Operating Systems Campus UAB,  
Building Q 08193 Bellaterra (Barcelona, Spain)  
Tel: +34 93 581 1990. Fax: +34 93 581 2478  
Preinscripció: <http://www.uab.es/>

<http://www.caos.uab.es>

# Postgraduate Studies: Computer Architecture and Operating Systems Department (CAOS)

## *Official Postgraduate Program (OPP) in “Engineering”*

### *Master in High Performance Computing*

(Typology: Research)

### *Doctor by the UAB (PhD)*

*This studies aim at developing advanced knowledge in the fields of Computer Architecture and High Performance Parallel Computers. They also provide the scientific and methodological bases that allow the student developing the research capacity in this field*

The Education and Science Ministry has distinguished the PhD program with the prestigious Quality Mention

#### **Coordinators of the program:**

Dr. Emilio Luque [Emilio.Luque@uab.es](mailto:Emilio.Luque@uab.es)

Dr. Dolores Rexachs [Dolores.rexachs@uab.es](mailto:Dolores.rexachs@uab.es)



## Structure of the Msc in High Performance Computing

The student must pass 120 European ECTS Credits (European System of Credit Transference)

- 60 ECTS: may be validated depending on the student’s origin (First course Modules)
- 60 ECTS in second course modules
  - 30 ECTS obligatory (Ob)
  - 10 ECTS optional (Op)
  - 20 credits dedicated to the research assignment (master project), in the department’s current research lines, which will require its defence in front of an evaluating commission.

<i>List of modules in 2<sup>nd</sup> course</i>	<i>ECTS</i>	<i>T</i>
<i>Methodology for research in High Performance Computing</i>	10	Ob
<i>Parallel Computers and Architecture</i>	10	Ob
<i>Tools and Environments for Parallel Programming</i>	10	Ob
<i>Research Project</i>	20	Ob
<i>Parallel Applications</i>	10	Op
<i>Distributed and Parallel Systems</i>	10	Op
<i>Operating Systems Design, Administration and Tuning</i>	10	Op