



Grupo de Física Matemática  
da Universidade de Lisboa

## SEMINÁRIO DE FÍSICA-MATEMÁTICA

Dia 13 de Maio de 2009 (quarta-feira), às 14h30m, na Sala B1-01

« **New algorithms in computational mathematics suited for high performance supercomputers** »

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(CEMAT, Instituto Superior Técnico)

### Abstract

Present and future supercomputers offer many opportunities and advantages to attack complex and demanding industrial and applied mathematical problems, but provide also new challenges. In the Peta-Flops regime, these concern both, the way to exploit the increasingly available power and the need of designing algorithms which are scalable and fault-tolerant at the same time. An example of a probabilistic domain decomposition method, which is indeed scalable and naturally fault-tolerant, is presented here.

Local:

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