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# AVISO DE CONFERENCIA

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## Energy-Aware Matrix Computations on Multi-Core and Many-core Platforms

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*entrada libre hasta completar el aforo*

resumen:

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Power, together with concurrency and fault tolerance, are crucial challenges that the high performance computing (HPC) community will have to face to efficiently leverage the Exascale systems that will be available at the end of this decade. With the rate of improvement in power efficiency experienced in supercomputing during the past few years, the target power consumption of 20 MWatts for the Exascale computer will still be exceeded by a factor of 5x by 2018-2020, rendering these machines economically unfeasible.

In this talk we will focus on energy-aware scientific HPC, targeting the task-parallel execution of matrix computations (numerical algorithms) on multi-core and many-core platforms. Topics addressed in the talk will include power modeling, power monitoring, and strategies to reduce energy reduction via scheduling, DVFS or idle-wait.

sobre Enrique S. Quintana-Ortí:

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Enrique S. Quintana-Ortí received his bachelor and Ph.D. degrees in Computer Science from the Universidad Politecnica de Valencia (Spain) in 1992 and 1996. Currently he is a Professor in Computer Architecture in the Universidad Jaume I of Castellón (Spain). He has published more than 100 papers in international conferences and journals, and has contributed to software libraries like SLICOT and libflame. His research interests include parallel programming, linear algebra, power consumption, as well as advanced architectures and hardware accelerators.