Conferencia

Title - Harnessing the power of reconfigurable computing platforms

14 de noviembre de 11:30-12:30 en la Sala de Grados A, ETSI Informática.

Abstract - Reconfigurable computing platforms are emerging as the most promising architectures to design general purpose systems due to their high flexibility and power efficiency. This talk will discuss several aspects of FPGA programming, analysing different languages that are available and their tradeoffs, and explaining a novel collection of benchmarks we proposed to evaluate them. Furthermore, the talk will discuss some of our previous works covering standard uses of FPGAs as accelerators (e.g. big data analytics, real-time vision) as well as some newer possibilities FPGAs have enabled, such as prototyping of HPC systems (both the computing and processing elements of exascale systems) or real-time architectural exploration of novel architectures (SpiNNaker neuromorphic computer).

Bio - Dr. Javier Navaridas is a Lecturer in computer architecture in the Advanced Processors Technologies group of the University of Manchester. Javier obtained his MEng in Computer Engineering in 2005 and his PhD in Computer Engineering (awarded with an Extraordinary Doctorate Award - top 5% theses) in 2009, both from the University of the Basque Country, Spain. Afterwards he joined the APT group with a prestigious Newton International Fellowship. His expertise encompasses interconnects, parallel and distributed systems, computer architecture, performance evaluation and characterization of application's behaviour. Javier is currently the leader of the workpackage on interconnects of the Exanest H2020 project which aims to design and prototype the interconnection infrastructure for exascale-capable computing systems.