

## Jesus Labarta

Professor, Computer Architecture, Technical University of Catalonia (UPC)

## Bio Summary (Education & Work experience)

Jesus Labarta is full professor on Computer Architecture at the Technical University of Catalonia (UPC) since 1990. Since 1981 he has been lecturing on computer architecture, operating systems, computer networks and performance evaluation. His research interest has been centered on parallel computing, covering areas from multiprocessor architecture, memory hierarchy, programming models, parallelizing compilers, operating systems. parallelization of numerical kernels, performance analysis and prediction tools. Since 2005 he is responsible of the Computer Science Research Department within the Barcelona Supercomputing Center (BSC). He has been involved in research cooperation with many leading companies on HPC related topics. His major directions of current work relate to performance analysis tools, programming models and resource management. His team distributes the Open Source BSC tools (Paraver and Dimemas) and performs research on increasing the intelligence embedded in the performance analysis tools. He is involved in the development of the OmpSs programming model and its different implementations for SMP, GPUs and cluster platforms. He has been involved in Exascale activities such as IESP and EESI where he has been responsible of the Runtime and Programming model sections of the respective Roadmaps. He leads the programming models and resource management activities in the HPC subproject of the Human Brain Project.