Jesús Labarta, the first European researcher to receive Ken Kennedy award

Jesús Labarta has received this award at SC17, the most important international event on HPC and supercomputing

The Association for Computing Machinery (ACM) and IEEE Computer Society (IEEE CS) have awarded Prof. Jesús Labarta, Computer Sciences director at Barcelona Supercomputing Center (BSC) with the ACM-IEEE CS Ken Kennedy Award. The ceremony has taken place today, November 14th at SC17 in Denver, USA. On Wednesday (November 15th), Jesús Labarta will give the Kennedy Award Presentation. The conference will be entitled “The Real Revolution … from the Latency to the Throughput Age” and it will take place at Mile High Ballroom at 9.15 am.

Labarta is the first non-American researcher to receive this recognition. Prof. Jesús Labarta is recognised for his seminal contributions to programming models and performance analysis tools for high performance computing.

ACM and the IEEE Computer Society co-sponsor the Kennedy Award, which was established in 2009 to recognize substantial contributions to programmability and productivity in computing and significant community service or mentoring contributions. It was named for the late Ken Kennedy, founder of Rice University’s computer science program and a world expert on high performance computing.

Throughout his career, Labarta has developed tools for scientists and engineers working in parallel programming. In the programming models area, he made fundamental contributions to the concept of asynchronous task-based models and intelligent runtime systems. With Labarta’s approach, by using pragma
directives that specify the region of code that constitutes tasks and the directionality of the data used by them, the programmer has a unified mechanism to allow intelligent runtime systems to detect and exploit concurrency as well as to manage locality. These ideas have been developed by Labarta’s team on the OmpSs model and Nanos runtime. His team’s work has also enhanced the interoperability between OmpSs (later Open multi-processing (MP)) and message passing interface (MPI).

In the performance tools area, Labarta’s team develops and distributes Open Source Barcelona Supercomputer Center (BSC) tools that are employed throughout the field. These BSC tools are designed to analyze an application’s behavior and identify issues that may impact performance. Paraver, the most widely used BSC tool, is a trace-based performance analyzer that processes and extracts information. Other tools like Dimemas or the Performance Analytics modules developed by Labarta’s team help squeeze relevant insight and perform predictive analyses from the raw performance data captured by the instrumentation packages.

**ACM press release**

Barcelona Supercomputing Center - Centro Nacional de Supercomputación