

## EDITORIAL COMMENT

We are proud to present the Book of Abstracts for the 4th BSC Severo Ochoa Doctoral Symposium.

During more than ten years, the Barcelona Supercomputing Center has been receiving undergraduate, master and PhD students, and supporting them to develop research and professional skills for a successful career through an extensive education and training program. Many of those students are now researchers and experts at BSC and in other internationally renowned research institutions.

With the years, the number of students and the span of their research areas have increased and the Center recognised that these highly qualified students and young researchers needed a forum to present their findings and fruitfully exchange ideas. As a result, in 2014, the first BSC Doctoral Symposium was born.

Last year, a total of 43 presentations were given, including 21 posters, and we had more than 90 attendees. The tutorials, given by researchers from Computer Science Department, reviewed the fundamental Algorithms and Techniques for Data and Computationally Intensive Problems (Prof. Vassil Alexandrov, ICREA-BSC) and introduced Scientific Visualisation of Data (Dr. Javier Espinosa) as well as provided some practice regarding these concepts. The keynote speaker, Prof. Francisco Doblas Reyes, gave the lecture: Big Data for the Study of Climate Change and Air Quality.

In this fourth edition of the BSC Severo Ochoa Doctoral Symposium, we have planned a keynote by Prof. Alfonso Valencia, the Director of Life Sciences Department in BSC, whose research is in the area of Bioinformatics. The tutorial will be on Deep Learning by Dr Darío Garcia Gasulla.

The talks will be held in five different sessions and will tackle the topics of: HPC & Novel Computer Architectures, Mathematics, Algorithms and Computational Science, Simulations and Modelling, Programming Models, Performance Analysis and Software Tools. The posters will be exhibited and presented during four poster sessions that will give the authors the opportunity to explain their research and results.