

# ADVCOMP 2017

## Forward

The Eleventh International Conference on Advanced Engineering Computing and Applications in Sciences (ADVCOMP 2017), held between November 12 - 16, 2017, in Barcelona, Spain, continued a series of events addressing fundamental advanced scientific computing and specific mechanisms and algorithms for particular sciences. The conference provided a forum where researchers were able to present recent research results and new research problems and directions related to them.

With the advent of high performance computing environments, virtualization, distributed and parallel computing, as well as the increasing memory, storage and computational power, processing particularly complex scientific applications and voluminous data is more affordable. With the current computing software, hardware and distributed platforms effective use of advanced computing techniques is more achievable.

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The event was very competitive in its selection process and very well perceived by the international scientific and industrial communities. As such, it has attracted excellent contributions and active participation from all over the world. We were very pleased to receive a large number of top quality contributions.

The conference had the following tracks:

- Computing applications in science
- Advances in computation methods
- Interdisciplinary computing
- Computing technologies

We take here the opportunity to warmly thank all the members of the ADVCOMP 2017 technical program committee, as well as all the reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and effort to contribute to ADVCOMP 2017. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the ADVCOMP 2017 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that ADVCOMP 2017 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the field

of advanced engineering computing and applications. We also hope that Barcelona, Spain, provided a pleasant environment during the conference and everyone saved some time to enjoy the unique charm of the city.

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