



*Special Session Call for Papers:*

## **High-Performance Computing and Big Data**

*Chair:*

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*Abstract:*

Development in science (biology, physics, chemistry), e-business, social media, internet of things, sensing etc. is resulting in a huge amount of data, that is different by nature and volume so needs new approaches to store, secure, manage, analyse, visualize and extract relevant knowledge for decision making. A big data phenomenon is intensively studied within statistics, machine learning artificial intelligence and mathematical optimization.

High Performance computing is the main technological vehicle enabling progress in management, analysis and modelling of big data. The Partnership for Advanced Computing in Europe (PRACE) is an international non-profit association, connecting partners that provide a persistent world-class high performance computing services for scientists and researchers from academia and industry in Europe. Recently PRACE was confirmed as the only e-Infrastructure on the ESRI 2016 Roadmap.

In the proposed special session, we plan to bring together researchers that are active in HPC and/or Big data. We expect to present novel and interesting results related to:

- new HPC architectures designed for big data;
- new HPC services and business models;
- applications of HPC in any subarea of science or business;
- management, analysis and modelling of any type of big data;
- algorithms and software for HPC and big data.

Note: When submitting the paper, please, select "Special Session: HPC and Big Data".