

## **Special Session on Algorithms, Methodologies and Frameworks for HPC in Geosciences and Weather Prediction**

### Topics:

Contemporary applications of Numerical Weather Prediction, Climate Research and studies in Geosciences demand multidisciplinary advancements in computing methodologies, including the use of multi/many core processors and accelerators, scalable and energy-efficient frameworks, Big Data strategies, as well as new or improved numerical algorithms. This includes, for example, development of the scalable, high-resolution methods for integration of fluid PDE's and efficient iterative solvers, highly optimized ports to modern hardware (CPU, GPU, Xeon Phi), code development and portability strategies, libraries for handling geophysical datasets. This special session aims at creating a multidisciplinary forum for discussion on state-of-the-art research and development towards the next-generation geophysical fluid solvers and weather/climate prediction application.

### Paper Submission and Publication:

Original papers are invited for the conference. Authors should submit full papers (draft version, PDF file, together with abstract) using the online submission system. Regular papers are not to exceed 10 pages (LNCS style). Papers will be refereed and accepted on the basis of their scientific merit and relevance to the conference topics. Abstracts of accepted papers will be available during the conference in form of a brochure. Only papers presented at PPAM 2015 will be included into the proceedings, which will be published after the conference by Springer in the LNCS series. Full camera-ready versions of accepted papers will be required by November 15, 2015.

### Important dates:

Submission of Papers: May 11th, 2015

Notification of Acceptance: June 20th, 2015

Conference: September 6-9, 2015

Camera-Ready Papers: November 15th, 2015

### Organizers:

Zbigniew Piotrowski (Institute of Meteorology and Water Management - National Research Institute, Poland)

Krzysztof Rojek (Czestochowa University of Technology, Poland)

### Program Committee:

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Willem Deconinck (The European Centre for Medium-Range Weather Forecasts, United Kingdom)

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