PRACE Scientific and Industrial Conference

Call for Contributions

HPC for Innovation
when Science meets Industry

PRACE Scientific and Industrial Conference

From **10 to 12 May 2016**, PRACE will organise the third edition of its **Scientific and Industrial Conference** – **PRACEdays16** – under the motto **HPC for Innovation: when Science meets Industry** in Prague, Czech Republic.

The conference will bring together experts from academia and industry who will present their advancements in HPC-supported science and engineering.

Call for Contributions

PRACE would like to receive contributions for presentations of excellent scientific merit from scientists and researchers from academia and industry world-wide. Past and present users of PRACE resources are highly encouraged to send in a contribution based on their PRACE-supported project(s), but it is **not** necessary that your past or present work was / is supported by PRACE and / or DECI to be eligible for this Call.

Submissions should take the form of an extended abstract (one page), detailing the novelty or originality of the science or research project and the need for HPC to accomplish the results. The forward-looking achievements should demonstrate scientific discoveries, innovation in industry or address society's grand challenges.

The conference programme provides space for **15 presentations** in 5 parallel sessions (3 per session). The maximum length of each presentation is 25 minutes, followed by 5 minutes for questions from the audience.

Applicants selected for a presentation will receive a free conference pass. Travel and accommodation will not be reimbursed. The standard conference fee is €60,-

PRACE supports the Women in HPC initiative (http://www.womeninhpc.org.uk/) which works towards equal representation in High Performance Computing. The Scientific Steering Committee and Industrial Advisory Committee of PRACE encourage female researchers and scientists to submit their contribution to both the Call for Contributions and the Call for Posters.

Topics

Applicants are invited to send in contributions from scientific or industrial domains that use HPC. Examples are (in alphabetical order):

- Aeronautics/Aerospace
- Astrophysics
- Automotive/Transport
- Chemistry
- Energy / Renewable Energy
- Engineering / Manufacturing / SMEs
- Environmental Sciences
- Finances
- HPC Vendors / ISV
- Life Sciences
- Material Sciences
- Mathematics
- Particle Physics

- Plasma Physics
- Oil & Gas
- Telecommunications/Electronics

The domain should be clearly indicated on the submission. If several domains apply, the main one should be indicated, with the secondary domain(s) in brackets.

Submissions

IMPORTANT

Please submit the **submission form** as well as the **one-page abstract** and your **short CV** in WORD format (.doc or .docx) to submissions-pracedays@prace-ri.eu. You may use an extra page for the application details. The minimum font size that you can use is 12 point. Send us a recent photo of yourself as a separate file (high-resolution .jpg or similar). The submission (excluding photo) must not exceed 8MB and address all of the points below. The deadline for submission of contributions is **29 November 2015**, 12:00 (noon) CET.

Submissions should include:
- A meaningful title for your contribution.
- The details of the author and co-authors:
  - Name and contact details, photo and a brief CV/biography of the (main) author especially his/her current position and area of interest. Please note that the CV/biography should be short (about ¼ page in minimum 12 point font type).
- The main domain and possible sub-domains to which the presentation pertains.

The **one-page abstract** should include:
- A description of the novelty / originality of the science/research project.
- A description of the need for HPC / how HPC was instrumental in obtaining the results.
- A forward-looking statement demonstrating scientific discoveries, innovation in industry or addressing society's grand challenges.

For examples see http://www.prace-ri.eu/pracedays15-presentations/.

Submissions as well as the resulting presentations and posters should be tailored to a wide audience, using layperson's terms and examples where possible.

All applicants, whether successful or not, will be notified of the outcome of the Call by **21 January 2016.**

A successful applicant has the right to decline participation until **25 January 2016**, 12:00 (noon) CET, so that an adequate replacement can be found.

Criteria for selection

The PRACE Conference Programme Committee, consisting of members of the PRACE Scientific Steering Committee (SSC) and the PRACE Industrial Advisory Committee (IAC) will review all submissions with the goal of selecting the most excellent presentations across as wide a range of scientific and industrial domains as possible.

Submissions will be assessed based on the following criteria:

- Novelty / originality of the science/research project.
- The need for HPC to accomplish the results and the way this is highlighted.
- The forward-looking achievements in scientific discoveries or in innovation in industry that should lead to solutions for society's grand challenges.

PRACE Scientific Award

PRACE awards a prize to the best paper submitted to the PRACE Scientific and Industrial Conference in one of the following areas:

- A breakthrough in science achieved through high performance computing.
- An algorithm or implementation that achieves a significant improvement in scalability or performance.
- A novel approach to performance evaluation on a massively parallel architecture.

The PRACE Industrial Advisory Committee (IAC) selects the paper to receive the PRACE Scientific Award, which will be announced at the Opening Session and presented at the closing session. The PRACE Scientific Award consists of a diploma and a token prize, as well as a voucher for € 1 500 which can be used to attend an HPC training or conference (based on reimbursement of real costs).

PRACE Industrial Award

The objective of the PRACE Award for the Most Innovative Industrial High-Performance Computing in Europe is to award the boldest industrial HPC application and illustrate how far one can take this technology in changing the present paradigms of European industry. The competition is open to organisations from all fields of HPC, proposing:

- Solution(s) pertaining to industry, i.e. it must be possible to apply it in an industrial context with clear benefits – there must be a market potential for that kind of solution.
- Solution(s) must represent some level of implementation maturity – we are not looking just for ideas but rather for working solutions, although we will also accept those in early implementation stages.

The PRACE Scientific Steering Committee (SSC) selects the paper to receive the PRACE Industrial Award, which will be announced at the Opening Session and presented at the closing session. The PRACE Industrial Award consists of a diploma and a token prize, as well as a voucher for € 1 500 which can be used to attend an HPC training or conference (based on reimbursement of real costs).

Publication

In co-operation with the author, PRACE will publish the abstracts of the selected submissions on the conference webpage of the PRACE website (http://www.prace-ri.eu/pracedays16) together with a photo and details of the presenter (name, institution, country, short biography). An example of how this is done can be found here: http://www.prace-ri.eu/pracedays15-presentations/.