

## JSCNews

Jülich  
Supercomputing  
Centre

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### DEISA Training Courses in Jülich

The DEISA consortium (Distributed European Infrastructure for Supercomputing Applications) is organizing two training courses which will take place at the Jülich Supercomputing Centre (JSC) on 13 and 14 January 2009. Both courses will be based on a number of practical programming exercises.

The first course on Tuesday 13 January will be an "Introduction to the DEISA Infrastructure". It will cover the basic aspects of the DEISA distributed supercomputer environment and the software tools that are used to access it. No prior knowledge is required for this course.

The second course on Wednesday 14 January is entitled an "Introduction to the Blue Gene/P". It is aimed at users who plan to port their codes to this new architecture. The course will introduce the basic features of the Blue Gene/P design and cover details of the Blue Gene/P machines within the DEISA infrastructure. Participants will be given access to the Blue Gene/P system at Forschungszentrum Jülich. DEISA staff will be at hand to help users port their codes and perform test runs. The attendees are expected to have a basic knowledge of parallel programming.

For more details and an application form, including information about accommodation in Jülich, see:

<http://www.fz-juelich.de/jsc/events/deisa-tc>  
(Contact: Dr. Florian Janetzko, ext. 1446)

### 3rd VI-HPS Tuning Workshop

During 2008, the Virtual Institute – High Productivity Supercomputing successfully organised workshops hosted by RWTH Aachen University and TU Dresden. These workshops provided hands-on training for over 30 participants in the effective use of tools for verifying the correctness and tuning performance of parallel programs.

The third such workshop will be held in Jülich from 16 to 20 February 2009. It includes two optional days for extra coaching in response to demand from previous workshops. Users of JUMP and JUGENE will be encouraged to participate and prepare their application codes for analysis and tuning in readiness for their next request for computing time. As JSC classroom space is limited, early registration is advised. Further information and an application form can be found at:

<http://www.fz-juelich.de/jsc/vi-hps-tw3>  
(Contact: Dr. Brian Wylie, ext. 6589)

### JSC at SC08 in Austin

SC08, the premier international conference on high-performance computing, networking, storage, and analysis, took place in Austin, Texas, from 15 to 21 November 2008. This year's event marked the 20th anniversary of the conference series, with a record attendance of more than 4,000 participants in the technical programme and more than 11,000 visitors to the accompanying exhibition. JSC participated in SC08 for the tenth time in succession.

Forschungszentrum Jülich GmbH  
in der Helmholtz-Gemeinschaft  
Jülich Supercomputing Centre  
52425 Jülich | Germany

Phone +49 2461 61-6402

[jsc@fz-juelich.de](mailto:jsc@fz-juelich.de)  
[www.fz-juelich.de/jsc](http://www.fz-juelich.de/jsc)

The new TOP500 list issued during SC08 ranked Jülich's supercomputer JUGENE eleventh worldwide and first in Europe.

Several JSC members contributed actively to the conference's technical programme. Bernd Mohr presented a tutorial on "Principles and Practice of Experimental Performance Measurement and Analysis of Applications on Parallel Systems", was on the programme committee for technical papers, and acted as chair for the paper session on "Performance Tools" and as judge for the "Cluster Challenge" competition. Felix Wolf and Jutta Docter acted as co-organizers for special interest meetings on "Tools for High Productivity Supercomputing" and for the "SC08 Blue Gene System Management Community", respectively.

In the exhibition, where more than 100 research institutions and more than 200 hardware and software companies worldwide were represented, JSC documented its role as one of the leading European high-performance computing centres. At its booth, JSC presented its wide-ranging activities in the form of displays, animated presentations, live talks, and individual consultations.

Particular emphasis was placed on JSC's community-oriented approach to support for scientific computing, the demonstration of tools developed by JSC for the performance analysis of parallel programs, and the JSC Grid activities. The two latter topics were also presented – together with collaboration partners – in two live talk sessions. Furthermore, the JSC booth was host to the German Research School for Simulation Sciences, which took the opportunity to enhance its visibility and attract new students for its master's and doctoral programmes. Finally, it was also host to the QPACE project – a collaboration between JSC, DESY, several European universities, and industry – which showcased its newly developed cell-based hardware. Impressions from the JSC booth can be found at:

<http://www.fz-juelich.de/jsc/news/sc08/>

JSC staff members were also responsible for the PRACE booth, where the Partnership for Advanced Computing in Europe introduced itself for the first time to the international HPC community and documented the existing network of European actors. (Contact: Dr. Walter Nadler, ext. 2324).

### First PRACE Scientific Conference

The first PRACE Scientific Conference was held on 26 November 2008 in Lyon. It was organized in conjunction with ICT 2008 – the largest research event for information and communication technologies in Europe. The programme focussed on applications, architectures and training for the petascale regime. It covered these topics from multiple perspectives, ranging from the application scientist to the policy maker.

Over 40 participants from 16 countries attended the sessions and engaged in discussions on collaborations be-

tween researchers, technical experts, and policy makers. The PRACE presentations were complemented by a booth in the ICT exhibition. This provided an excellent opportunity to inform the 4,500 participants from existing and prospective ICT projects about the objectives and achievements of PRACE. The second PRACE conference will be organised jointly with the DEISA Symposium and take place in Amsterdam in May 2009.

(Contact: Dr. Thomas Eickermann, ext. 6596)

### PROSPECT e.V. founded

On 15 December 2008, the association PROSPECT e.V. was founded in Munich. PROSPECT (the acronym stands for Promotion of Supercomputing and Petacomputing Technologies) is an open European interest group with partners from research institutes, universities and industry in the field of high-performance computing (HPC), supercomputing and numerical simulations in a diversity of scientific and engineering fields. The Jülich Supercomputing Centre, the Barcelona Supercomputing Centre and the Leibniz-Rechenzentrum Garching will chair the association. The aim of PROSPECT is to strengthen the European position in the worldwide HPC competition with regard to the development and usage of future petaflop supercomputers by science and industry. PROSPECT is already a member of the Advisory Group for Strategic Technologies (STRATOS) of the Partnership for Advanced Computing in Europe (PRACE). Within STRATOS, partners of the PRACE project will set up joint projects in cooperation with industrial partners involving consortia like PROSPECT. The aim is to gain access to and influence HPC technology roadmaps worldwide and facilitate contributions from European industry to these technologies. The preparation of a European Technology Platform (ETP) for HPC is an important long-term goal of PROSPECT.

(Contact: Prof. Thomas Lippert, ext. 3173)

### Events

#### DEISA Training Courses

Date: 13 - 14 January 2009, 09:00 - 17:00

Venue: Ausbildungsraum 2, Jülich Supercomputing Centre

Details: <http://www.fz-juelich.de/jsc/events/deisa2009>

#### 3rd VI-HPS Tuning Workshop

Date: 16 - 20 February 2009, 09:00 - 17:00

Venue: Ausbildungsraum 1, Jülich Supercomputing Centre

Details: <http://www.fz-juelich.de/jsc/vi-hps-tw3>

#### Winter School "Multiscale Simulation Methods in Molecular Sciences"

Date: 2 - 6 March 2009

Venue: VR-Rotunda, Jülich Supercomputing Centre

Details: <http://www.fz-juelich.de/conference/wsms/>

**Editor: Dr. Sabine Höfler-Thierfeldt, ext. 6765**