

## JSCNews

Jülich  
Supercomputing  
Centre

*No. 175 • June 2009*

### Europe's Fastest Computer Unveiled in Jülich

Three supercomputers for European research were unveiled on 26 May 2009 in Jülich in a ceremony attended by the Federal Minister for Education and Research, Prof. Dr. Annette Schavan, and the Prime Minister of North Rhine-Westphalia, Dr. Jürgen Rüttgers. The three systems include the supercomputer JUGENE, which with a computing power of one petaflop/s is currently the fastest computer in Europe.

More than 250 guests attended the inauguration ceremony. At the beginning, it soon became clear that this event is not only of importance for Jülich. All three partners in the Gauss Centre for Supercomputing GCS – formed by the national supercomputing centres in Stuttgart, Garching and Jülich – were proud to present the new petaflop system to the public. JUGENE is the first German supercomputer system to be selected and purchased in the context of the GCS. Therefore, the welcoming address was given jointly by the GCS partners, represented by Prof. Dr. Achim Bachem, Chairman of the Board of Directors of Forschungszentrum Jülich, Prof. Dr. Arndt Bode, Chairman of the Board of Directors of the Leibniz Rechenzentrum in Garching, and Prof. Dr. Michael Resch, Director of the High Performance Computing Center Stuttgart.

"The supercomputer JUGENE will secure Europe independent access to a decisive key technology of the 21st century," said Bachem, who is also Coordinator of PRACE, the European Supercomputing Al-

liance. PRACE is funded by the EU and will coordinate the creation of a Europe-wide computer infrastructure. Bachem expressed special thanks to the Federal Government and the state of North Rhine-Westphalia for the many years of support and funding.

"The supercomputers at Forschungszentrum Jülich show that North Rhine-Westphalia is already one of the leaders in strategically important sectors," said Prime Minister Rüttgers. "We want to make North Rhine-Westphalia the top state for innovation – and Forschungszentrum Jülich with its excellent research will make a major contribution to achieving this goal."

In a round table discussion, representatives of the companies Bull, Sun, Intel and ParTec gave their views on the unique collaboration established in building the supercomputers JUROPA and HPC-FF. JSC director Prof. Dr. Dr. Thomas Lippert expressed the view that in building a computer from best-of-breed parts, one has to combine the heart and soul of the computer: the processors form the heart, the software represents the soul. Yvan Capouet of the European Commission pointed out that great hopes are placed in the new HPC-FF system, which will be exclusively available to European fusion researchers.

A short time-lapse video showed the building of the supercomputers in the JSC machine room. In the second discussion, representatives of PRACE, the European Commission and IBM emphasized the importance of JUGENE for European researchers.

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)

Finally, Minister Schavan stressed the importance of supercomputing for Germany. "This is a good day for the German Gauss Centre and a good day for Europe as well. Acquiring JUGENE demonstrates Germany's bid for leadership in supercomputing," she said. "This day confirms our strategy that the GCS as a model of partnership in supercomputing is right for Germany".

The supercomputers were officially launched by Schavan, Rüttgers and Bachem, who together pushed a lever for the start-up (see photo). After that, they visited the machine room of the Jülich Supercomputing Centre.

The three supercomputers will be fully operational and accessible to the users from July. For technical details see: <http://www.fz-juelich.de/jsc/jugene>  
<http://www.fz-juelich.de/jsc/juropa>  
 (Contact: Dr. Sabine Höfler-Thierfeldt, Tel. 6765)



From left to right:  
 Jürgen Rüttgers (Prime Minister of North Rhine-Westphalia),  
 Achim Bachem (Chairman of the Board of Directors, Forschungszentrum Jülich),  
 Annette Schavan (Federal Minister for Education and Research)

## Colloquium in Honour of Horst Rollnik

Prof. Dr. Dr. h.c. mult. Horst Rollnik is one of the founding fathers of the Höchstleistungsrechenzentrum (HLRZ), later renamed John von Neumann Institute for Computing (NIC), that supports scientific research and the peer-reviewed distribution of computing time on the Jülich supercomputers. For many years, he shaped NIC as head of its Scientific Council. Since 1997, he has organized and headed informal meetings of the three national supercomputing centres in Garching (LRZ), Stuttgart (HLRS), and Jülich (JSC). These meetings were the basis for developments that culminated in the creation of the Gauss Centre for Supercomputing.

Prof. Rollnik's contributions to the progress of scientific computing in Germany were honoured in a colloquium on 14 May 2009 at JSC. Talks were given by Prof. Bachem, Chairman

of the Board of Directors of Forschungszentrum Jülich, by several leaders of earlier NIC research groups (Prof. Gutbrod, Prof. Schilling, Prof. Wolf), and by the former head of the Zentralinstitut für Angewandte Mathematik (ZAM, now Jülich Supercomputing Centre, JSC), Prof. Hoßfeld. They addressed the history of NIC and the research performed and supported through it and its research groups as well as the future of NIC. Prof. Lippert, director of JSC, presented Prof. Rollnik with a board from one of the first supercomputers at Jülich as a souvenir.

For more information see  
[http://www.fz-juelich.de/nic/events/rollnik\\_colloquium.html](http://www.fz-juelich.de/nic/events/rollnik_colloquium.html)  
 (Contact: Dr. Walter Nadler, ext. 2324)

## JSC @ ISC09

The International Supercomputing Conference will take place in Hamburg from 23 to 26 June 2009. As in previous years, JSC will present its wide-ranging supercomputing activities there (booth #722) in close collaboration with its partners in the Gauss Centre for Supercomputing and the Gauss Alliance. Apart from presenting its new supercomputers and a milestone science project, JSC will also showcase the newly developed cell-based hardware of the QPACE project – a collaboration between JSC, DESY, several European universities, and industry. In addition, JSC members will also participate in the PRACE (#730) and UNICORE (#753) booths. Why don't you pay us a visit if you're attending the conference! For up-to-date information on the JSC activities at ISC09 see:

<http://www.fz-juelich.de/jsc/news/isc09>  
 (Contact: Dr. Walter Nadler, ext. 2324)

## Events

### 40 Jahre Technomathematik

Speaker: Prof. Dr. Helmut Neunzert, ITWM Kaiserslautern  
 Date: Wednesday, 24 June 2009, 11:00 - 12:00  
 Venue: Hörsaal, Jülich Supercomputing Centre

### Einführung in die parallele Programmierung mit MPI und OpenMP

Speakers: Marc-André Hermanns, Wolfgang Frings, JSC  
 Date: 4 - 7 August 2009, 9:00 - 16:30  
 Venue: Ausbildungsraum 1, Jülich Supercomputing Centre  
 Registration: [M.A.Hermanns@fz-juelich.de](mailto:M.A.Hermanns@fz-juelich.de), ext. 2054

### Introduction to programming and using the supercomputers in Jülich

Speakers: JSC Staff Members  
 Date: 10 - 11 August 2009, beginning on 10 August, 13:00  
 Venue: Hörsaal, Jülich Supercomputing Centre  
 Registration: [B.Scheid@fz-juelich.de](mailto:B.Scheid@fz-juelich.de), ext. 6402

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