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Gauss Centre for Supercomputing

PRESS RELEASE 11/2015

GCS Sponsors Students from Technische Universität München for the Student Cluster Challenge at SC15

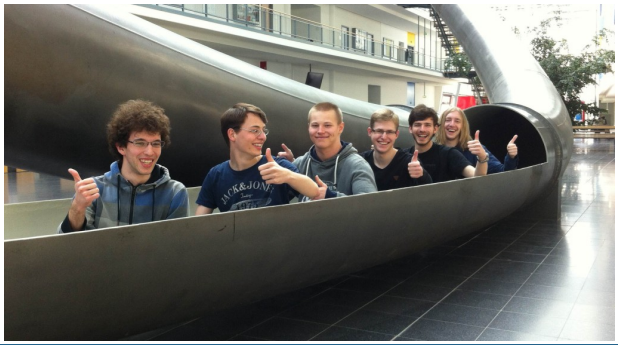
Berlin/Germany, October 15, 2015 -- The Gauss Centre for Supercomputing is delighted to announce its financial support of a team of computer science students from the Technische Universität München (TUM) participating in the Student Cluster Competition (SCC) at this year's Supercomputing Conference (SC) in Austin, TX. The Munich based team, which is the only European representative among the nine teams qualifying for the annually repeating competition at SC, will compete on the SC15 exhibit floor in a real-time challenge by solving high-performance computing (HPC) tasks set by the SCC-committee. The TUM-students are leveraging the HPC infrastructure and expertise of GCS centre Leibniz Supercomputing Centre in Garching near Munich (LRZ) to thoroughly prepare for the upcoming tough contest.

Team „TUMuch Phun" (pronounced: too much fun) consists of six highly motivated and equally talented computer science students of the TU München who perceive the SC Student Cluster Challenge as a great opportunity to gain further experience in HPC. At the real-time, non-stop, 48-hour challenge held at the upcoming HPC Conference in Austin, Texas, they will have to race to complete a real-world workload across a series of applications on a system of their own choice whilst ensuring for the energy consumption to be less than 3120 watt, as otherwise penalties apply.

To get best prepared for the on-site race, the students are receiving comprehensive guidance and support by HPC experts Sebastian Rettenberger and Roland Wittmann. The two members of TUM's Scientific Computing department are frequent users of the SuperMUC infrastructure of the LRZ, thus have extensive experience working with HPC systems and with optimizing and parallelizing HPC codes. For instance, Rettenberger was member of a team who in a LRZ Extreme Scaling Workshop optimized 70,000 lines of code of "SeisSol", a software to simulate earth quakes, which resulted in achieving a SeisSol application performance of 1.42 Petaflops for a weak scaling test on LRZ's HPC-system SuperMUC and a sustained system performance of 1.09 Petaflops.

"GCS is proud to sponsor the team TUMuch Phun for the Student Cluster Challenge at the upcoming Supercomputing Conference," says Dr. Claus Axel Müller, Managing Director of GCS. "GCS's mission is to promote young and bright talent in the field of HPC. We respect courageous undertakings such as this one, especially on an international level. As we are well aware of the financial bottlenecks students face when boldly taking on a challenge of this dimension, we are happy to help out. We wish the team lots of success and keep our fingers crossed!"

GCS supports the TUMuch Phun activity by contributing to the team's expenses related to the Student Cluster Challenge at SC15.



TUMuch Phun team members (from left to right): Michael Zellner, Gregor Matl, Felix Thimm, Daniel Gallenberger, Felix Späth, Sharru Möller

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About GCS: The Gauss Centre for Supercomputing (GCS) combines the three national supercomputing centres HLRS (High Performance Computing Center Stuttgart), JSC (Jülich Supercomputing Centre), and LRZ (Leibniz Supercomputing Centre, Garching near Munich) into Germany's Tier-0 supercomputing institution. Concertedly, the three centres provide the largest and most powerful supercomputing infrastructure in all of Europe to serve a wide range of industrial and research activities in various disciplines. They also provide top-class training and education for the national as well as the European High-Performance Computing (HPC) community. GCS is the German member of PRACE (Partnership for Advance Computing in Europe), an international non-profit association consisting of 25 member countries, whose representative organizations create a pan-European supercomputing infrastructure, providing access to computing and data management resources and services for large-scale scientific and engineering applications at the highest performance level.

GCS has its headquarters in Berlin/Germany.

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