

PRESS RELEASE 01/2020

GCS Supports Three German University Teams in ISC20 Student Cluster Competition

Berlin/Germany, May 29, 2020 – The Gauss Centre for Supercomputing (GCS) is pleased to announce that it is repeating its role as co-sponsor of undergraduate students participating in the Student Cluster Competition (SCC) at the annual International Supercomputing Conference (ISC). The teams supported by GCS—the teams representing the Friedrich-Alexander University Erlangen-Nuremberg (FAU), the Hamburg University, and Heidelberg University—are 3 of the 14 participants qualified for the contest. Other competitors come from China, Indonesia, Lithuania, Poland, Singapore, South Africa, Spain, Switzerland, Taiwan, and the U.K.

The SCC occurs in conjunction with the International Supercomputing Conference (ISC), which was scheduled to take place in Frankfurt/Main. However, due to the COVID-19 crisis, ISC will now be held in digital form June 22–24, and the SCC will take place in remote form as an online competition, running June 1–24. Utilizing the supercomputing platforms kindly provided by the National Supercomputing Center Singapore, the student teams will be tasked to configure, code, and benchmark a series of high-performance computing (HPC) and artificial intelligence (AI) applications. Joining the global fight against COVID-19, several applications being used by scientists and researchers for fighting the virus will additionally have to be tested by the students.

In getting prepared for this year's cluster competition, the German student teams had to cope with an unprecedented scenario. Just like HPC professionals and countless other sectors of the global economy, face-to-face team meetings and on-site-training at the university campuses have been impossible to organize. That means all the students' preparation work has had to happen online—a format which has now been applied to the competition itself too. "Working online is the de facto standard in the world of HPC, the live event at ISC has always been a great opportunity for 'HPC newcomers' to actually meet a broad variety of people from all over the world and especially world class HPC experts. While this may seem less important to an experienced ISC attendee, for the students it is often the key trigger for an enthusiastic future in HPC. However, I highly appreciate the extra effort of the organizers to make this event possible, even or especially in these extremely different, difficult and busy times", comments Alexander Ditter, advisor of team segFAUIt, representing Friedrich-Alexander University Erlangen-Nuremberg.

Despite all unplanned changes, the German teams are making the best of the given situation and even find some positive aspects in the competition's online format. "As far as providing a basis for a fair and balanced competition is concerned, this competition will definitely be different from the past," explains Michael Kuhn, coach of the team representing the Hamburg University. "As we all will be utilizing the same HPC platform, identical conditions will apply to all teams." This aspect is backed by Aksel Alpay, advisor of the Heidelberg University team. "Since we all will be 'normal users' being granted 'identical user rights', minor differences in our knowledge as to how to configure, code, and benchmark the HPC and AI application tasks might eventually make the essential difference. The competition will for sure be very special, and very exciting," Alpay says.

... / to be continued on page 2

Page 2 of GCS Press Release 01/2020 (May 29, 2020)

As in the past years, GCS supports the German SCC teams by supplying a financial buffer to cover expenses related to the competition. Additionally, GCS's User Services and Support group was available for the students to provide training and HPC support in the lead up to the event. "We are happy to continue with our engagement to support German HPC talent," says Dr. Claus Axel Müller, managing director of GCS. "It is very important for us to attract students to the world of HPC and foster their motivation and interest. We wish all teams success, best of luck, and lots of fun in this unique version of the annual student competition."

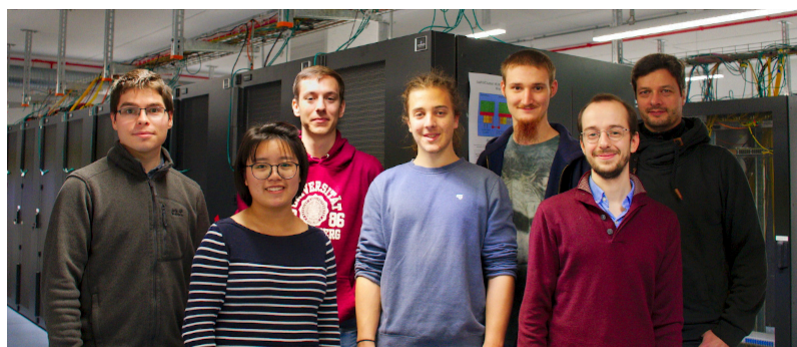
The three German student teams participating in the ISC 2020 Student Cluster Competition:



Team segFAULT of Friedrich-Alexander University Erlangen-Nuremberg. Back, left to right: Jakob Emmerling (substituted by Felix Geiter/not shown*), Maximilian Ley (Team Captain), Johannes Bonk, Veit Götz. Front, from left: Simon Prucker, Niklas Heidenreich (substituted by Nico Heinz/not shown*): Advisors (not shown): Alexander Ditter and Benedikt Oehrich. © FAU
*due to COVID-19 related restrictions, an updated team foto could not be taken



Team University of Hamburg. Top, left to right: Daniel Bremer, Felix Maurer, Johannes Coym, Julius Plehn, Michael Kuhn (advisor). Bottom, left to right: Lina Meyer, Roland Fredenhagen, Ruben Felgenhauer, Yannik Könneker, Jannek Squar (advisor) © Hamburg University



Team Heidelberg University. Back, left to right: Christoph Smaczny, Christian Heusel, Holger Wünsche, Falk Loewner. Front, left to right: Yajie Liang, Robin Heinemann, Aksel Alpay (advisor). Not shown: Sabine Richling (advisor). © Heidelberg University

Page 3 of GCS Press Release 01/2020 (May 29, 2020)

Additional Information about the Student Cluster Competition at ISC20 is available at <https://www.isc-hpc.com/student-cluster-competition.html> and <https://www.hpcadvisorycouncil.com/events/student-cluster-competition/>

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-0/1 supercomputing institution. Together the three centres provide the largest and most powerful supercomputing infrastructure in all of Europe and serve a wide range of industrial and research activities across various disciplines. They also provide top-tier 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 Advanced Computing in Europe), an international non-profit association consisting of 26 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 is jointly funded by the German Federal Ministry of Education and Research and the federal states of Baden-Württemberg, Bavaria and North Rhine-Westphalia. It has its headquarters in Berlin/Germany.

Contact:
Regina Weigand, GCS Public Relations
+49 711 685-87261
r.weigand@gauss-centre.eu

www.gauss-centre.eu