

Research Project

Standard Performance Corporation (SPEC): Research Group (RG)

Project funded by own resources

Project title Standard Performance Corporation (SPEC): Research Group (RG)

Principal Investigator(s) [Ciorba, Florina M.](#) ;

Co-Investigator(s) [Guerrera, Danilo](#) ; [Cavelan, Aurélien](#) ;

Organisation / Research unit

Departement Mathematik und Informatik / High Performance Computing (Ciorba)

Project Website <https://research.spec.org>

Project start 01.01.2019

Probable end 31.12.2043

Status Active

The SPEC Research Group (RG) is a new group within the [Standard Performance Evaluation Corporation \(SPEC\)](#) established to serve as a platform for collaborative research efforts in the area of quantitative system evaluation and analysis, fostering the interaction between industry and academia in the field. The scope of the group includes computer benchmarking, performance evaluation, and experimental system analysis in general, considering both classical performance metrics such as response time, throughput, scalability and efficiency, as well as other non-functional system properties included under the term dependability, e.g., availability, reliability, and security.

The conducted research efforts span the design of metrics for system evaluation as well as the development of methodologies, techniques and tools for measurement, load testing, profiling, workload characterization, dependability and efficiency evaluation of computing systems.

The High Performance Computing (HPC) group at the Department of Mathematics and Computer Science (DMI) at University of Basel (www.dmi.hpc.unibas.ch) represents our university in the SPEC RG since January 2019. Prof. Florina Ciorba is the primary representative for the visibility of Uni Basel in SPEC RG.

The HPC Group at DMI collaborates with the SPEC RG in an effort to develop new research benchmarks that can stress different capabilities of the system through the use of scientific computing codes. The goal is to employ existing load balancing solutions not only to existing benchmarks but to create benchmarks of interest for the scientific community.

ă

Financed by

University funds

Add publication

Add documents

Specify cooperation partners

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
4496864	Ciorba, Florina M.	Lachiche, Nicolas, Professor	University of Strasbourg	01.09.2018	31.01.2020
4496865	Ciorba, Florina M.	Samet, Ahmed, Professor	INSA Strasbourg	01.09.2018	30.01.2020
4496866	Ciorba, Florina M.	Haus, Utz-Uwe	Cray EMEA Research Lab (an HPE company)	01.11.2018	31.12.2020
4496867	Ciorba, Florina M.	Gless, Sabine, Professor	University of Basel, Faculty of Law	01.09.2018	31.12.2043
4496868	Ciorba, Florina M.	Sengstag, Thierry, Deputy Director	SciCORE - University of Basel	01.01.2016	31.12.2019
4496869	Ciorba, Florina M.	Lima Pilla, Laércio, Research Scientist	CNRS France and UFSC Brazil	01.01.2019	31.12.2043
4496870	Ciorba, Florina M.	Ebrahimi-Pour, Neda, PhD Student	University of Siegen	01.08.2018	31.07.2019
4496871	Ciorba, Florina M.	Barsch, Valeria, Senior Scientist	Fraunhofer Institute for Industrial Mathematics ITWM	01.01.2018	31.12.2019
4496872	Ciorba, Florina M.	Klemm, Michael, Senior Application Engineer	Intel GmbH	01.12.2018	31.12.2019
4496873	Ciorba, Florina M.	Iwainsky, Christian, Scientific Staff	Competence Center for High Performance Computing in Hessen	01.12.2017	31.12.2019
4496875	Ciorba, Florina M.	von Suchodoletz, Dirk, Leiter Abteilung eScience	Rechenzentrum, Albert-Ludwigs-Universität Freiburg	01.09.2016	31.12.2018