## The PRACE 2017 Winterschool



The PRACE 2017 Winter School "Fuelling Scientific Discovery with HPC Infrastructure" [1] took place at Tel Aviv University, Tel Aviv, Israel from February 6-9, 2017. The school was organized by the Inter-University Computation Center (IUCC) and attended by 58 participants from Israel, Spain, Italy, Turkey and Austria. Four lecturers from Israel and three from the Jülich Supercomputing Centre provided expert knowledge on a range of topics.

The emphasis of the school program was to provide a thorough introduction and overview of how to use PRACE resources and to raise awareness of the value of the resources available to local and regional users.

The Porter School of Environmental Studies Building, Tel Aviv Israel, a LEED [2] Platinum certified building, hosted the PRACE 2017 Winter School.

The school started out on Monday morning with a general introduction to parallel computing including getting started guides to MPI and OpenMP by Guy Tel-Zur. In the afternoon, the participants learned why they should pay attention to parallel

IO and how to take advantage of it in their own programs from Sebastian Lührs.

A welcome dinner at the 'Milk & Honey Whisky Distillery' [3], Israel's first whisky distillery, on Monday evening, gave the international participants, lecturers, and the school's program organizers the chance to get to know each other and learn about whisky distilling and tasting. It included a a tour of the distillery and a tasting of some of the spirits produced.

The session on parallel IO continued on Tuesday morning and was followed by a introduction to parallel performance analysis and tuning by Bernd Mohr. On Wednesday the focus moved to many-core architectures such as GPUs and Xeon Phi Knights Landing. Both of these sessions were taught by Jan Meinke. The Thursday morning session approached GPUs from an algorithmic point of view presented by Dennis Rapaport. The school concluded with two parallel sessions on LAMMPS (Dan Mordehai) and multiprocessing in Python (Mordechai Butrashvily). Each session consisted of a mix of lectures and hands-on exercises for which the participants were granted access to computing resources in Tel Aviv and Jülich.

## References

- [1] PRACE 2017 Winter School "Fuelling Scientific Discovery with HPC Infrastructure": https://events.prace-ri.eu/event/549/
- [2] LEED: http://leed.usgbc.org/leed.html
- 3] Milk & Honey Whisky Distillery: http://mh-distillery.com

Written by Jan H. Meinke (Jülich Supercomputing Centre (JSC), Germany)

Contact: Jan Meinke, i.meinke@fz-iuelich.de

45