

Piz Daint @ CSCS (Centro Svizzero di Calcolo Scientifico)



Piz Daint is a Cray XC50/XC40 system with XC50: 5704 hybrid nodes of 12 cores with Nvidia Tesla accelerators and 64GB RAM, and XC40: 1813 multicore nodes of 2 x 18 cores with 64/128 GB RAM. Intel Xeon E5 CPUs. 12th in Top 500; 4th in Europe.

Piz Daint & SOLARNET

SOLARNET provides privileged access to Piz Daint. In total *1.5 million node hours* are foreseen to be used for SOLARNET. Three cycles, each using 500'000 node hours are planned. Ideally, we would have 4 projects per cycle, each using 125'000 node hours.

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- *“The physics of the solar chromosphere – confronting models with observations”*, PI Sanja Danilovic, Inst. Solar Physics, Stockholm Univ.; got 250'000 nh, used 153'200 up to Oct. 30;
- *“Magneto-Convection in Realistic Sunspots with MURaM”*, PI Markus Schmassmann, Leibniz Inst. Solar Physics, Freiburg; got 110'000 nh, used 76'000 up to Oct. 30.

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Cycle 3: You can expect the call for the third cycle in April 2021.

How to apply?

- 1.) You will be asked to submit a *preliminary proposal* anticipated for *May 2021*. A preliminary proposal consists of essentially the title of the project and the name of the PI and the person who is expected to run the code(s) on Piz Daint. The proposed scientific projects should be relevant for *high-resolution solar physics*;
- 2.) The preliminary proponents get then a common project on Piz Daint with a quota of some 1000 nh/quarter for trying out their code(s) and *do the performance analysis*, which is a necessary part of the final proposal;
The process of adapting your code to run on Piz Daint and do the performance analysis takes some time. So, start early on!
- 3.) The *final proposal* consist of a scientific part and a technical analysis. For the 3rd cycle, it is anticipated to be submitted by end of *September 2021*.
- 4.) The science part of the proposal is evaluated by two anonymous experts outside of the TAC and the performance analysis is evaluated by CSCS. Based on their reports, the TAC allocates the node hours to the projects.



Lots of empty space in the computers hall of CSCS for the next generation (hybrid) system. Visitors of the 1st SOLARNET school with Matthias Kraushaar (in front) who manages SOLARNET at CSCS.