

Research Facilities 2.0 - Sustainable Computing

The EU funded project Research Facilities 2.0 has the aim to make large scientific infrastructures and institutes more sustainable.

Within the project green and sustainable concepts for the computing infrastructures at DESY for scientific data storage and data analysis shall be developed. This has to happen in close collaboration among the various teams in IT, but also within DESY and other research infrastructures in Germany.

In this context the sustainability potentials of ARM / RISV-V / AMD Bergamo based servers shall be evaluated or standard server based power reduction options as for instance frequency reduction. Other options are to investigate power reduction options for storage and/or network (especially InfiniBand). Students with more experience in software development can start to develop an initial concept of a digital twin of the computing infrastructure at DESY which is to be investigated.

Group

IT

Project Category

B5. Computing

Special Qualifications

experience in analysis of complex systems, interest in green IT, experience in Linux scheduling systems, experience with modern hardware, experience in modern programming languages, experience with digital twins

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