

The Design and Development of the scientific data analysis software framework for High Energy Photon Source in China

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Recent advances in X-ray beamline technologies, including the advent of very high-brilliance beamlines at next-generation synchrotron sources and advanced detector instrumentation, have led to an exponential increase in the speed of data collection. As a consequence, there is an increasing need for a data analysis platform that can refine and optimize data collection strategies in real-time and effectively analyze data in large volumes after the data collection. The increased data volume and rate push the demand for computing resources to the edge of current workstation capabilities. Advanced data analysis methods are required to keep up with the anticipated data rates and volumes.

We proposed a data analysis software framework, to address the data challenges at High Energy Photon Source. In this talk, we will introduce the design and development of the framework and the scientific software developed based on the framework. The future plan will also be introduced.

Alternate track

I read the instructions above

Yes

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Session Classification: Computing and Data handling

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