Research on Comprehensive Diagnosis Analysis Platform at CSNS Spectrometer

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In this data driven concept era of instrument, we will need the versatile platforms to visualize and analyse their event data to explore, interpret and understand the information hide in the data at the China Spallation Neutron Source (CSNS). At present, the online instrument monitoring service based on EPICS and CSS is too professional to be suitable for the new real-time distributed data streaming framework. In this talk, a new comprehensive diagnostic analysis platform is developed based on Open-falcon and Grafana. Data can be freely and autonomously uploaded to the platform where provides comprehensive diagnostic and analysis service on the webpage. The current and historical data and curves can be conveniently browsed on the PC and mobile terminal anytime, anywhere. Moreover a platform application about the value stability of neutron normalization is presented in scattering experiment.

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