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## Data Acquisition for the n2EDM Experiment

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Currently a new experiment is being built for the measurement of the neutron electric dipole moment at PSI called n2EDM.

Compared to its predecessor, many improvements will be made not only to the apparatus itself, but also to the supervisory control and data acquisition system.

For nEDM it is essential to not only record, but also to influence the experiment automatically which incorporates decisions that are based on previous measurements.

The concept is completely modular, thus development can be done in parallel, and new devices can be added easily - even while the experiment is running.

The modules are connected via network using Standard Commands for Programmable Instruments (SCPI) over TCP for messaging.

Data sampling and recording is done simultaneous. Synchronization is achieved via Precision Time Protocol (PTP).

Multiple control stations are possible and any graphical user interface is separated operation and recording.

A simple command language for arbitrary sequences, loops and conditional execution is available.

While the framework is clearly optimised for an nEDM measurement, it may be used for other experiments with similar scale and measurement procedure.

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