

NUSTAR Data Acquisition: Realizing Signal Exchange Points

Friday, 19 October 2018 11:50 (15 minutes)

The NUSTAR Data Acquisition System (NDAQ) will provide a data acquisition infrastructure for the foreseen NUSTAR experiments. While all of those experiments require correlated data from detectors located at Super-FRS focal planes, they are very different in terms of used detectors and are in general set-up at different locations along the beam lines downstream from the Super-FRS. In order to distribute trigger signals to the needed locations in a flexible way, a network based on fiber-optics and so-called Signal Exchange Points will be built. The goal is to be able to configure NDAQ, for a given experiment, in a way that data from all detectors of interest can be correlated as needed, while trigger signals can be generated based on coincidences in experiment and Super-FRS detectors as desired.

Commercially available electronics does not meet the SEP specifications, which is why we are currently working on the detailed specification and production of appropriate modules. The hardware concept for SEPs will be presented and discussed.

Primary author: Dr HEINZ, Andreas (Chalmers University of Technology)

Presenter: Dr HEINZ, Andreas (Chalmers University of Technology)

Session Classification: Kärnfysikermöte

Track Classification: SFS-KF möte