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## **Flexible instrument setups: concept and experience from the SCS Beamline at european XFEL**

*Tuesday 16 September 2025 17:00 (1 hour)*

The spectroscopy and coherent scattering instrument (SCS) at the European XFEL was designed for a wide range of experimental techniques in the soft x-Ray regime. In order to conduct the experiments, the instruments have to host different kind of (experimental) chambers and detectors system(s). The changeover between the different configurations should be done as easy as possible but also with a reliable workaround. The poster will present different approaches and concepts in order to realize this. On the one hand the physical transport and installation will be shown. Examples are here the transport with air-pads and three fixation points for a suitable reproducibility of the different chambers. Experience from the operation and the needed infrastructure will be described as well. On the other hand, the electrical connections are important for control and taking data. The poster will show here the local box solution as well as the usage of field bus terminals and give also the outlook for a flexible programming of the PLC control.

### **Footnotes**

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