



Contribution ID: 30

Type: Oral

## Update of the magnetic measurement benches of the ESRF

**Abstract** —This talk gives an overview of the update of both the hall probe measurement bench, and the stretched wire measurement bench. These benches were developed in house at the ESRF during the last decades mainly to measure permanent magnet undulators. The new hardware of both benches was chosen to improve their ergonomics, safety and ease of use, as well as the versatility and accuracy of the measurements. The hall probe bench in particular was redesigned with the hybrid undulator assembly process in mind. It will integrate a quick mounted touch probe to align magnet modules and measure magnet and ferric pole positions in the assembly. A new measurement software is being developed using Python, providing the motion control, the measurements acquisitions and various data analysis tools. It will handle single magnet measurements, magnet list sorting, and undulator assembly and optimization all in the same place, with a modern UI.

**Primary author:** SAMAILLE, Lucas (ESRF)

**Co-authors:** Dr LE BEC, Gaël (ESRF); Dr VERSTEEGEN, Reine (ESRF)

**Presenter:** SAMAILLE, Lucas (ESRF)