

Overview of the activities and challenges of the magnet section at the Paul Scherrer Institut

S. Sanfilippo, PSI

This talk will present an overview of the current activities, capabilities and challenges of the PSI magnet section concerning the design and the measurement of accelerator magnets.

After an overview of the instrument park, the talk will focus on three ongoing activities:

- the design and the measurements of the magnets for the upcoming Swiss Free Electron Laser featuring series of small aperture quadrupoles and dipoles with severe requirements on field quality;
- the strategy developed for the spare magnets including radiation hard magnetic elements ;
- the challenges and the progress in the design of a magnetic system dedicated to the location of the current center line in the ITER torroidal coils.