Project Progress Review (PPR) 4-2025

WP- 4

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Magnets
- Overview of the magnets of PERLE (Authors: Beam dynamics group)
- Dipole magnets
  - Rectangular dipoles
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
  - Sector dipoles
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
  - B-com dipoles
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
  - Kicker magnets
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
  - Injection/extraction chicanes
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
  - Quadrupole magnets
    - Magnetic design (Author: H. Abualrob)
    - Mechanical design (Author: BE)
- Power supplies (Author: TBD

- Visit to the ESRF
  - Updated packages needed for the bench operation are communicated
  - Packages for automation of quadrupoles measurement are communicated
  - We develope the packages for automation of dipoles measurement

- Arrival of 2 Palestinian interns (late due to the war in the region)

  - Mohammedkhaled Salah on Juin 30th
    - Set up installation (completed)
    - Bench operation (in progress)
    - Mesurement automation for quadupoles
    - Measurement automation for dipoles

  - Jana Souyani (Juin 24th)
    - Design of the quadupoles of the temporary line (in progresse)
    - Design of the dipole spectrometer
    - Design of the kickers

Points de vigilance

- Magnets from CERN, should I follow up ?

- SSW bench
  - New computer (migration from windows 7 to windows 11)
  - Control system is procedures running on Igor Pro, we have licence for Igor6, last version Igor9 is used by the ESRF
  - We try to manage with Igor6 and migrate to Igor9 if needed

- CTF3 quadrupoles in ACO building
  - Pwer supplies are missing

  - Other old model Bruker power supplies from Trieste are available, but documentations are missing ! Contact with Bruker by E. Froidefont (LPSC) to look for documentation. However, more information about their origin is needed, can we ask the IJCLab administration about relevant documents ?

  - If powered, we might think in using them for the temporary line. Otherwise, design and production becomes mandatory, which option ?

  - If we take the design and production option, it becomes urgent to get a final requirements from WP2