

- ➔ The foreseen tests concern principally equipment of the QPS upgrade to be installed in the LHC arcs
 - Expected hadron flux ($E > 20 \text{ MeV}$): up to $10^{10} \text{ cm}^{-2} \text{ y}^{-1}$
- ➔ Equipment under test
 - Field-bus coupler type DQAMGS (1x)
 - Latest MicroFip™ version
 - Field-bus coupler type DQAMS600
 - Old MicroFip™ version
 - Used for test controls and DAQ for TE-MS-C-SCD test
 - Bus-bar protection system type DQQBS (2x)
 - High precision systems based on device already tested last year on CGNS
 - Micro-converters, DC-DC converters, amplifiers etc.
 - Verification of firmware (error correction code), drifts etc.

→ Equipment under test

- Symmetric quench detection system type DQQDS (2x once prototypes are available)
 - New development – individual components successfully tested @ PSI in March 2009
 - Flash based FPGA, ADCs, amplifiers
 - Verification of firmware (error correction code), drifts, false triggers etc.
- Power pack prototype unit
 - LDO regulators (also tested @ PSI), rectifier bridges
- Equipment under test is not expected to show fatal errors
 - Test should simulate LHC environment
 - Low flux required (TSG46B)

→ Support for TE-MS-SCD by providing DAQ channels

- Solid state relays used for the HTS current lead heating system