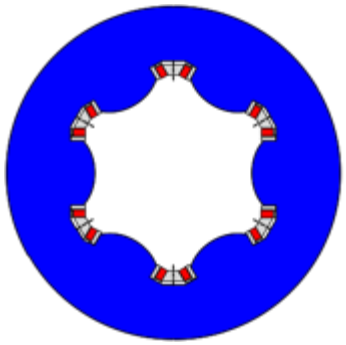
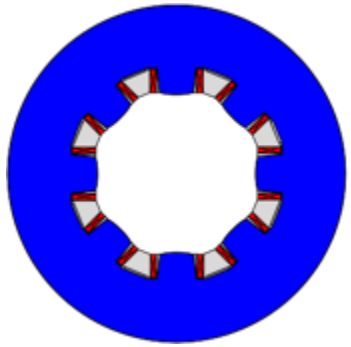
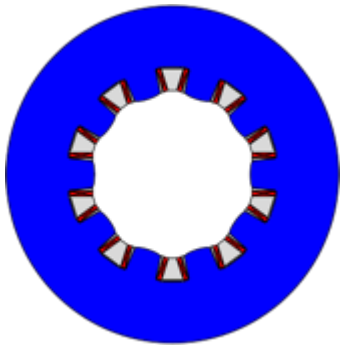
La costruzione dei Correttori SuperFerrici per HiLumi

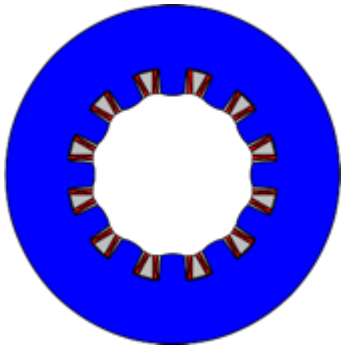
Marco Statera

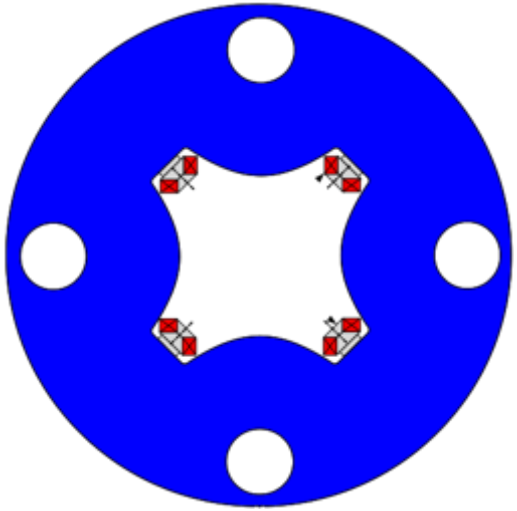
UNA FAMIGLIA DI MAGNETI

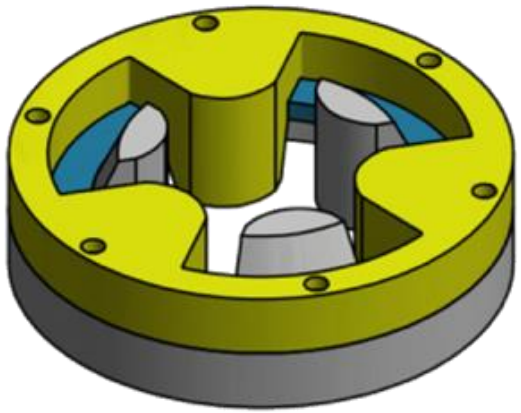






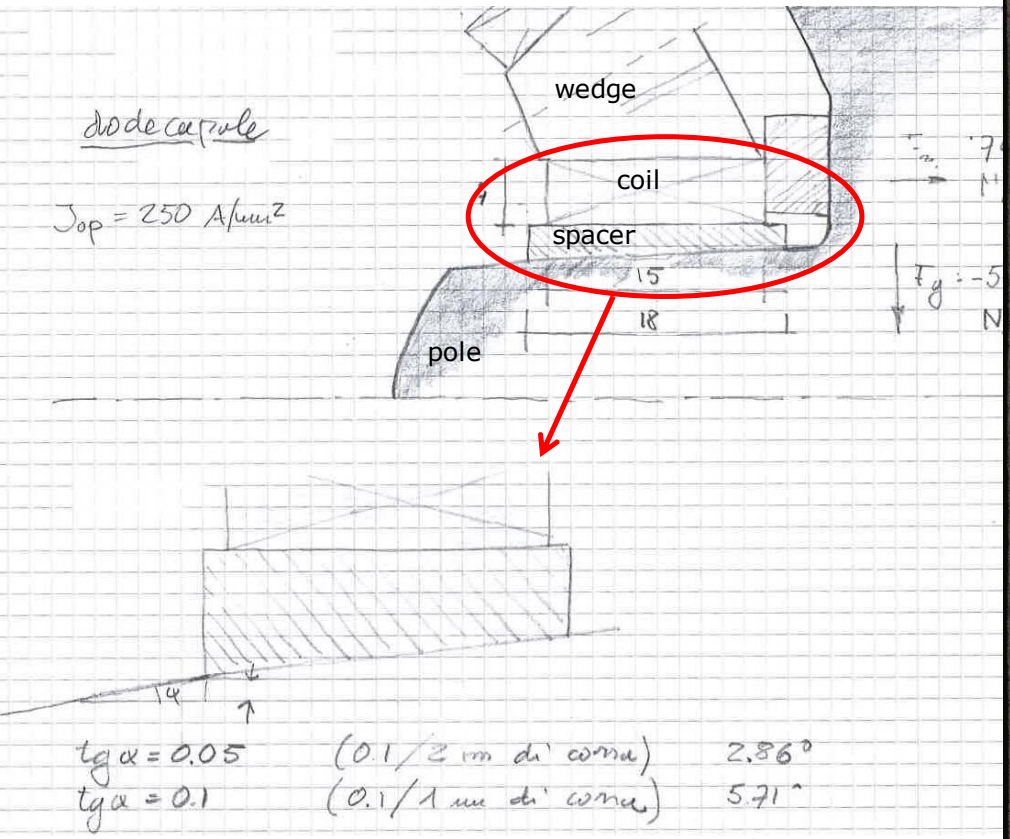


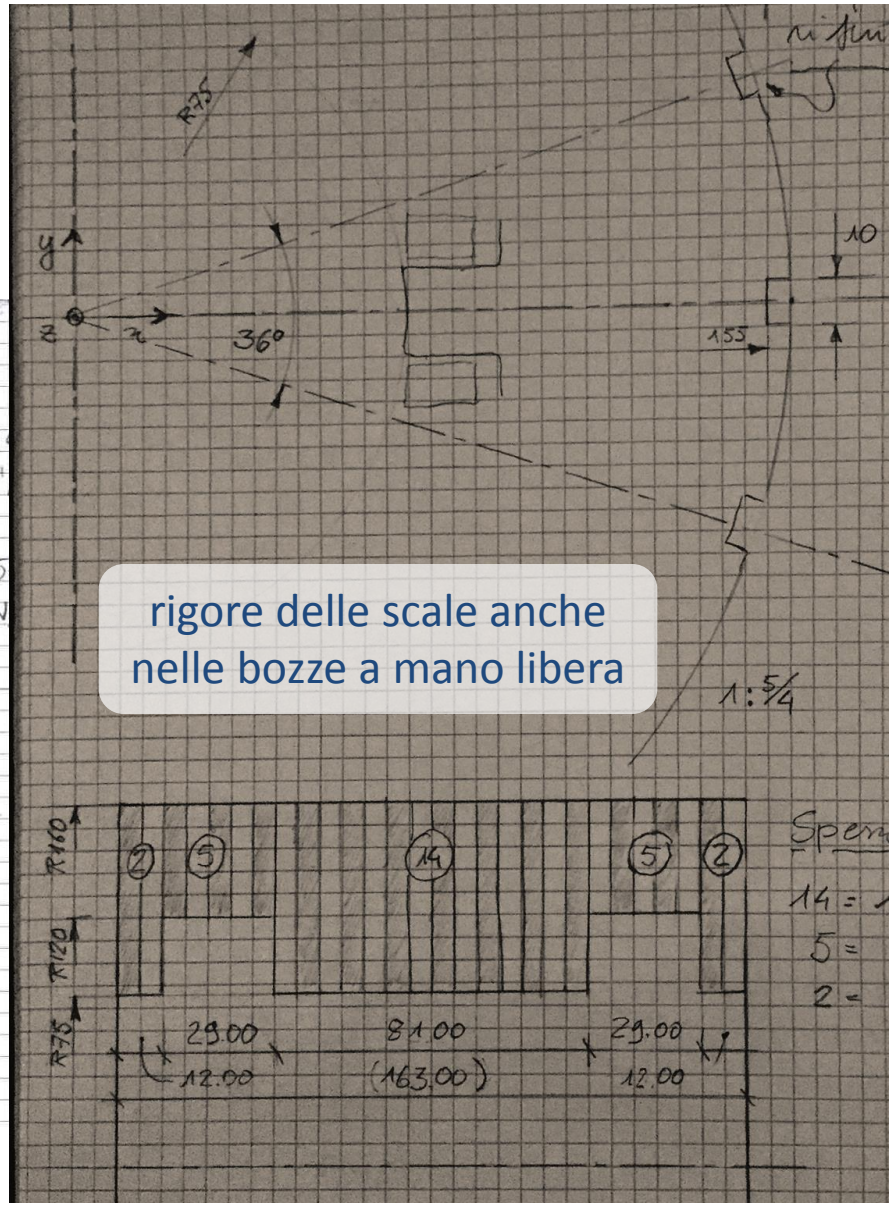




LE PRIME BOZZE

tutto inizia dai disegni sul logbook di Giovanni

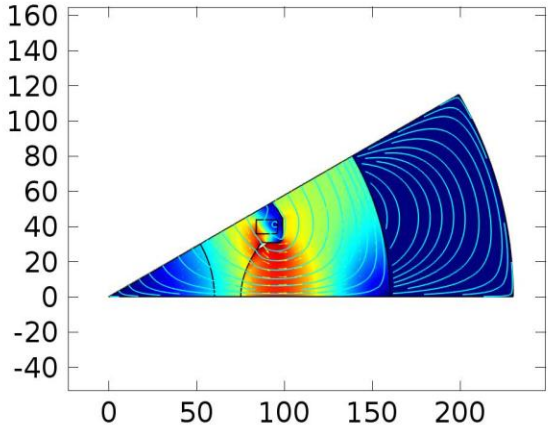


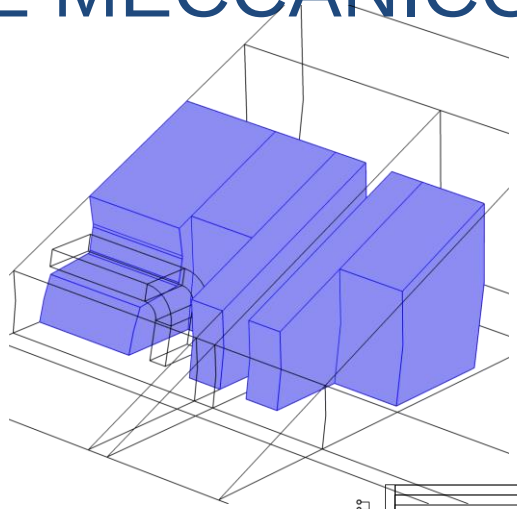


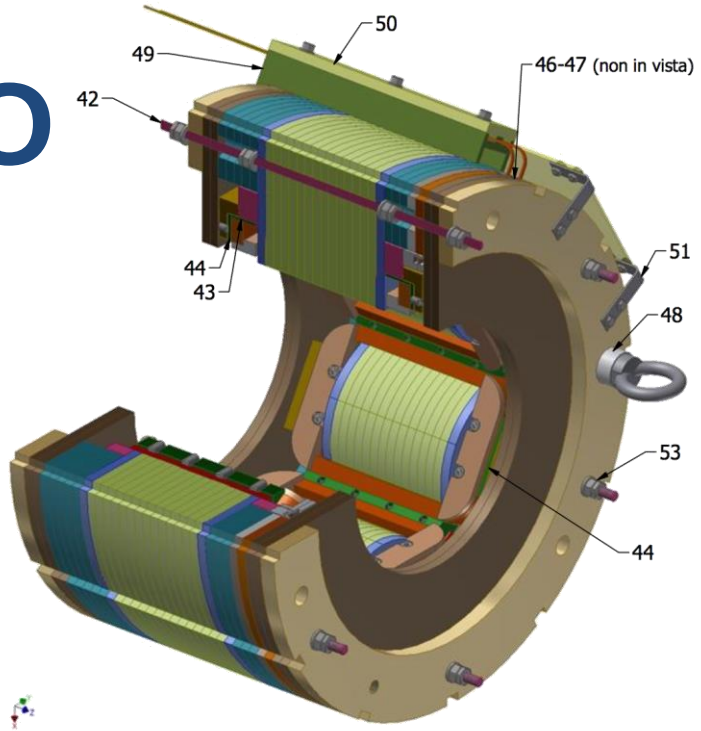
rigore delle scale anche nelle bozze a mano libera

IL PROGETTO

ELETTRICO E MECCANICO

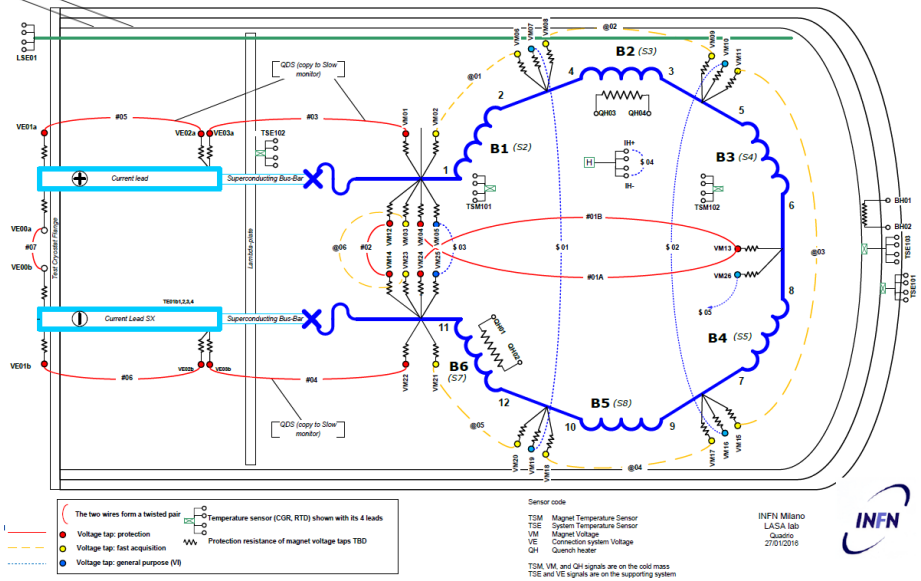




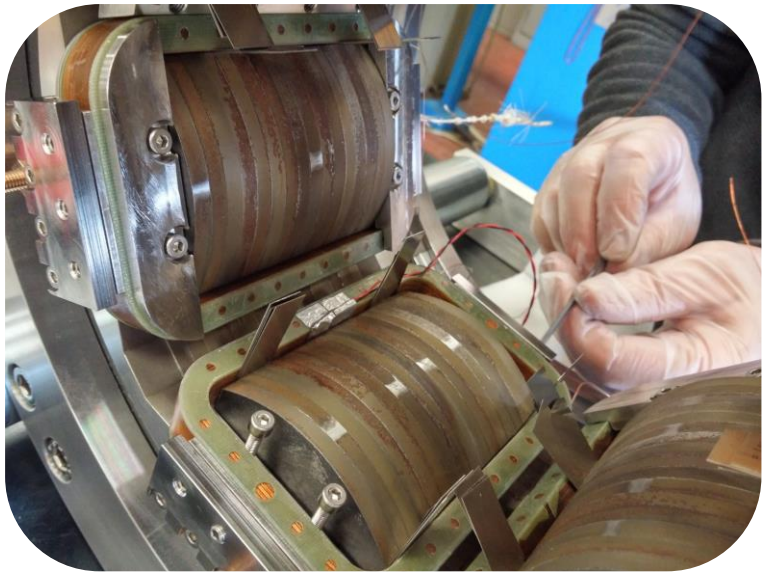


La cura dei dettagli:

- dal campo magnetico alle contrazioni termiche alle connessioni elettriche…
- confronto con i colleghi



LA COSTRUZIONE

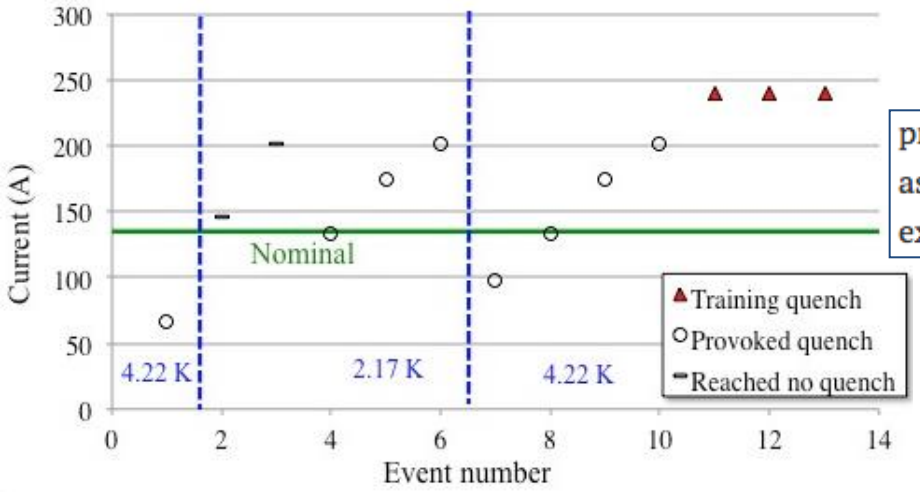


IL TEST

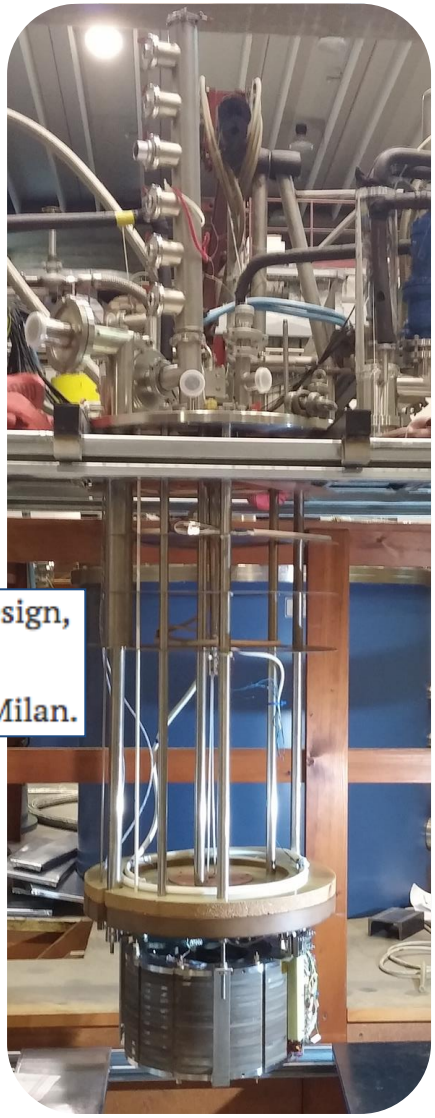
SUPER AND FERRIC: THE FIRST HL-LHC COMPONENT IS READY

Although the actual installation phase in the tunnel will only start in 2024, the first magnet – a sextupole – of the High-Luminosity LHC (HL-LHC) is ready and working according to specifications. This first component is also rather unique as, unlike the superconducting magnets currently used in the LHC, it relies on a "superferric" heart.

CERN Bulletin 10-11, March2016



project. "At LASA, we dealt with the design, assembly and testing of the magnet," explains Giovanni Volpini from INFN Milan.



An expert in the LASA Laboratory (INFN Milan, Italy) works on assembling the first sextupole corrector of the HL-LHC.

Super-magnets at work

CERN Courier 54/6, May 2016

Superconductivity Conference 2016
Denver (CO) Sept. 2016

Construction and Cold Test of the First Superferric Corrector Magnet for the LHC Luminosity Upgrade

MISURE AL CERN

ULTERIORE CONFERMA DELLA QUALITÀ DEL PROGETTO E DELLA REALIZZAZIONE DEL SESTUPOLO

OTTUPOLO

- progettato e supervisionato da Giovanni
- costruito al LASA
- testato con successo al LASA

GRAZIE