

US High-Luminosity LHC Accelerator Upgrade Program (AUP)

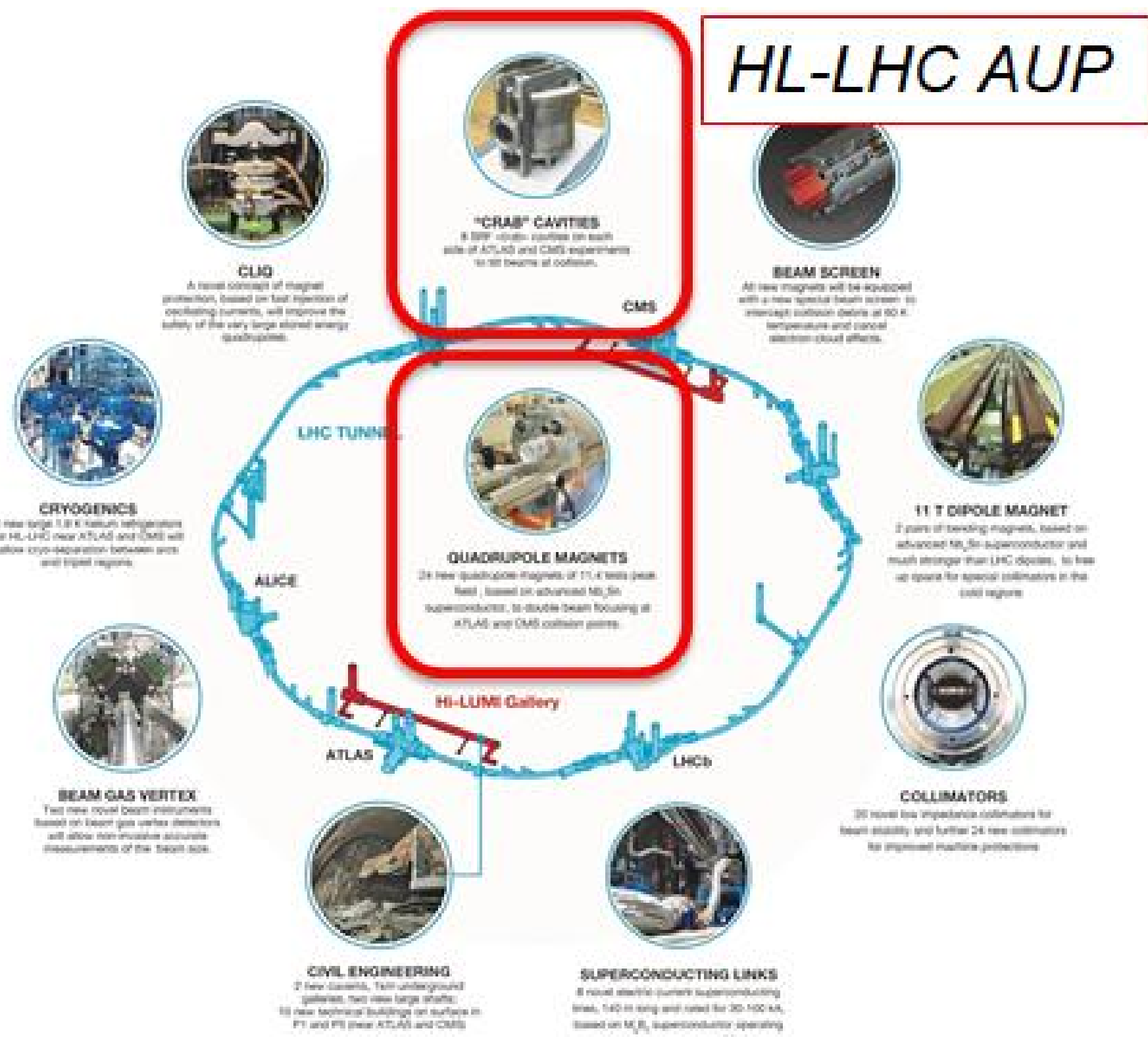
V. Marinozzi, M. Baldini on behalf of the AUP collaboration

Fermilab, APS-TD Magnet Systems Department

FERMILAB-POSTER-20-013-TD

High-Luminosity LHC

HL-LHC project aims at increasing luminosity from 300 fb⁻¹ to 3000-4000 fb⁻¹. The project is led by CERN with the support of an international collaboration of 29 institutions in 13 countries, including the United States.



DOE baselined HL-LHC AUP Project coordinates efforts from US Labs (FNAL, BNL, LBNL with contributions from SLAC, JLAB, ODU & FSU) AUP is responsible of providing 8 “crab” cavities to tilt the beams at collision, and 10 Q1/Q3 cryo-assemblies. The Cryo-assemblies will be assembled from LQMXXFA cold Masses built by HL-LHC AUP and Cryostat kits provided by CERN.

Q1 and Q3 cryo-assembly

