

Minutes

EN/MME meeting for HL-LHC CRAB CAVITIES

Monday, the 19th May 2014

Room112/2-023

Regular meeting for the HL-LHC CRAB CAVITIES (WP4) project at EN/MME.

Attendees: Luis Alberty, Rama Calaga, Ofelia Capatina, Teddy Capelli, Giuseppe Foffano, Raphael Leuxe, Thierry Renaglia.

General

Ofelia informed the table that the contact person for cryogenic aspects (service module, test module for the SM18, etc..) working in collaboration with Krzysztof Brodzinski (TE-CRG) will be Teddy. Pep and Nadine will take over the vacuum aspects development for the DO. It has also been mentioned that Alick M. has been interested to discuss dimensions/interfaces for the helium tank and waveguides (module for the SPS tests), and that after the latest developments, the UK Team is expected to participate at the construction of the design file for the dressed cavities.

Ofelia informed that *Niowave* requested the adoption of standard elements whenever possible. CERN could develop stainless steel flanges with special features in order to adopt the procedures approved (qualification wise) by the company. A minimum distance is to be defined in order to keep the brazed elements away from the EBW parts.

DQW

The open topics to be discussed with the BNL team are: materials/qualifications, cavities with the HOM, interfaces (Ofelia). Are the HOM going to be manufactured at Cern? Latest infos about the cables of the HOM tell that these are expected to have an increased thickness, and heat losses can be up to 3x higher.

Thierry showed a suggestion for an HOM pick-up with side connection (instead of axial) – fig. 1. Due to integration reasons, up to 3 different ways of integrating the HOMs may exist (Ofelia). Depending on the material chosen for the HOMs' flanges, the material for the caps will be chosen accordingly.

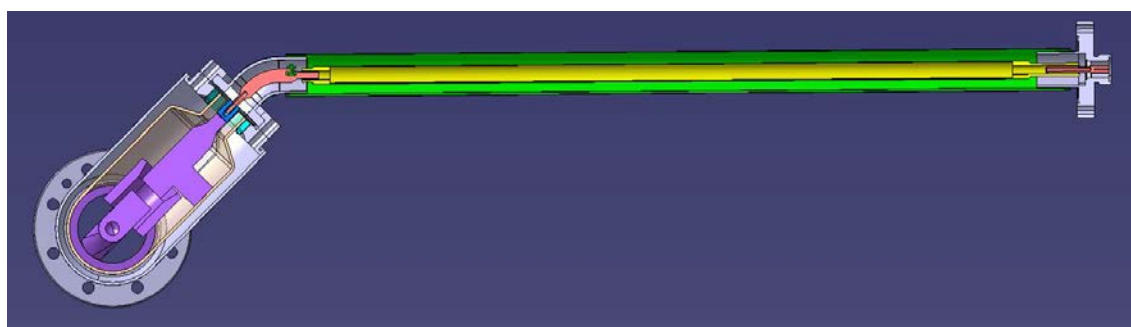


Fig. 1 - Thierry's suggestion for HOM side connectivity

The first priority at the moment is to clearly define the geometry of the cavity + interfaces (Ofelia).
The FPC pickup structure is expected to be reinforced.

Norbert will perform several studies on 3-D models developed by Raphael for the assessment of the EBW transition parts (Nb tube/NbTi disks), aiming at defining adequate welding thicknesses.

RF-Dipole

The next meeting will take place Wednesday at 16h00.

Minutes taken by Luis Alberty