

Crab Cavities Technical Coordination VI



Location: 376/01-020
Date: 15th August 2016
Time: 10.30
Scope: coordination and alignment of tasks involved in the preparation of SPS tests, follow up of master plan.
Attendees: Carlo Zanoni, Mateusz Sosin, Giovanna Vandoni, Frank Gerigk, Ofelia Capatina, Alick Macpherson, Aurelio Berjillos Barranco

Alick presented an update of the time needed for the activities performed in the clean room. He also informed that an internal meeting to discuss the status of the development of the tools and procedures will be held on the 23rd. Frank reminded that, on the same line, a formal review of the clean room procedures will be held on the 12/13 of October. An invitation will be sent to the mailing-list in order to remind that. Alick also provided some info on the status of the upgrades of the cleanroom (floor) and cabling of the vertical cryostats. The floor has been ordered and the cabling will start in September.

Mateusz presented a similar update focused on the alignment activities. Once the cryomodule is fully assembled, about 3 weeks are dedicated to the alignment tests such as sensors calibration and vacuum cycling. The vacuum cycling test is needed to verify if the behavior of the cryomodule (and therefore of the sensors that are constrained onto it) is repeatable. It has also been reminded that even a medium vacuum (~1 mbar) is sufficient for this test.

In order to clarify the available space for alignment activities (and storage) a visit to SM18 will be organized by Alick.

Open points of the workflow have then been reviewed. One missing item is a moment in which the systems inside the cryomodule are checked for a GO/NO GO for closure. Other tasks have been fine-tuned and/or reordered. Carlo will take care of summarizing it a new version of the workflow.

As last point, Alick showed some preliminary results of the test of the tuner with the PoP cavity, which are very good. Even in the presence of a few particles, the equivalent accelerating voltage exceeds 5 MV. The resolution of the tuner seems to be in the order of +5Hz.

Next meeting will be focused on the readiness of cryogenic equipment for SM18.

Action list:

| | Action | Responsible | Opened | Closed | Result, Comment |
|---|--|-------------|---------|--------|--|
| 1 | Complete list of acceptance criteria | All | 30.5.16 | | |
| 2 | List of people whose input is missing in the list of acceptance criteria | Rama | 30.5.16 | | |
| 3 | Provide input to complete master plan | All | 30.5.16 | | Mostly complete, tools column still not detailed (not needed for plan, |

| | | | | | |
|----|--|-------------------------------------|-----------|-----------|---|
| | | | | | initially). Time and sequence should be verified by everybody |
| 7 | Provide inputs for time/duration of each step | Marco, Leonel, Rama, Mateusz, Alick | 27.6.16 | 17.8.16 | completed |
| 8 | Drive the proposal of an optimal solution for the stiffening frame that includes the helium tank or part of it | Carlo, Marco, Alick | 11.7.16 | | Frames under design |
| 9 | Define list of talks for the clean room review 12/13 October | Frank | 11.7.16 | | |
| 10 | Clarify who's in charge of the different leak detections | Giovanna | 1.8.2016 | | |
| 11 | Pressure test dressed cavity: pre-alert HSE, verify the need of measurements | Marco, Carlo | 1.8.2016 | | |
| 12 | Update milestones list | Carlo | 1.8.2016 | 15.8.2016 | Updated with the suggestions from Frank and Giovanna |
| 13 | Launch update of instrumentation list | Giovanna, Carlo | 1.8.2016 | | Main inputs from Alick and Krzysztof |
| 14 | Follow up reservation of assembly and storage areas in SM18 | Marco | 1.8.2016 | | |
| 15 | Create master plan | Aurelio | 15.8.2016 | | |

Minutes taken by Carlo

Next meeting: Monday 29th of August