

November 06, 2019

TOPIC

Trim tuning of DQW LHC-series at RI

ATTENDEES

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MINUTES

- Metrology will be provided by RI.
- 3 trimming steps, the third being the last one.
- Symmetric trim tuning: favor symmetry of the cavity; the two welds are performed after machining if finished, sequentially.
- Probes: fabricated by CERN, handled to RI.
- RI is responsible for trim tuning. CERN-BNL is a witness with know-how.
- Non-disclosure agreement.

ACTION ITEMS

Silvia -- Generate a target frequency table for DQW LHC-series cavities:

- Jacketed, evacuated, at 2K, delivering 3.4 MV to LHC beam ~ 400.75 MHz
- Include target frequency for each trimming steps
- Correct units and column label (expected → measured), update LFD

CERN -- Check:

- if enough load for tuner;
- desired frequency point if tuner breaks to avoid synchro-betatron sidebands (at 3, 8 kHz);
- LFD for jacketed CERN SPS-series cavity
- Cavity profile sketch with location of trim edge needed to calculate available trim tuning range.
- Clamp: to be prepared by RI, design to be reviewed by CERN-BNL.