

20th Summary of Meeting for S1-Global module design, Cryomodule and Cryogenics (20090908)

Date: 2009/09/08

Time: 22:00-23:00 (Japan Time)

Attendant: Jim Kerby, Tug Arkan, Tom Peterson, Serena Barbanotti, Hans Weise, Eiji Kako, Hirotaka Nakai, Hitoshi Hayano, Tetsuo Shidara, Yasuchika Yamamoto, Akira Yamamoto, Norihito Ohuchi

All presentations are unloaded in the INDICO site:

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confid=4152>

Agenda

1. Schedule and purpose of visiting FNAL and DESY (Eiji Kako)
2. Program of cryomodule session at ALCPG09 (Norihito Ohuchi)
3. S1-G cryomodule component list (Norihito Ohuchi)
4. High pressure code activity in KEK (Akira Yamamoto)

Discussion

(1) Schedule and purpose of visiting FNAL and DESY (Eiji Kako)

- Eiji Kako and Shuichi Noguchi would visit FNAL at 10 and 11 September and Eiji and Norihito Ohuchi would visit FNAL at 18 September.
- Purposes of visiting FNAL and DESY are to understand the cavity string assembly in the clean room and the alignment procedure and tools in the assembly area out of the clean room.
- Discussion subjects at FNAL, (a) Schedule of S1-G at KEK (b) Present status of KEK cavities and couplers, (c) Assembly procedure of KEK STF-1 cavities and (d) Checking list for cryomodule assembly work for S1-G.
- Discussion subjects at DESY, (a) Schedule of S1-G at KEK (b) Present status of KEK cavities and couplers, (c) Present status of Cryomodule-C for S1-G, (d) Discussion with individual personnel about the assemblies in clean room, the coupler, the tuner and the cryomodule for S1-G.

C: The date of 18th September is Friday. The time is limited. Axel Matheisen, Lutz Lilje and Wolf-Dietrich Moeller will attend the SRF workshop at Berlin. We can continue the discussion in the workshop.

(2) Program of cryomodule session at ALCPG09 (Norihito Ohuchi)

- Proposed program items:
 1. S1-G cryomodule construction status report, 30 min, Norihito Ohuchi
 2. S1-G cryomodule component list, 15 min, Norihito Ohuchi
 3. KEK cavity preparation for S1-G, 15 min, Eiji Kako
 4. FNAL cavity preparation for S1-G, 15 min, Jim Kerby
 5. DESY cavity preparation for S1-G, 15 min, Wolf Dietrich Moeller
 6. S1-G cryomodule test schedule- general issues, 20 min, Hitoshi Hayano
 7. S1-G cryomodule cavity test items- in detail, 20 min, Eiji Kako
 8. S1-G cryomodule thermal test items- in detail, 20 min, Norihito Ohuchi
 9. HLRF plan for S1-G in KEK, 20 min, Shigeki Fukuda
- The 9th item 'HLRF plan for S1-G in KEK' was added in the program after the Webex meeting.

(3) S1-G cryomodule component list (Norihito Ohuchi)

- The component list is now almost completed.
- The components for Module-C in the list will be checked while Norihito will visit Zanon.
- The components for FNAL and DESY cavities will be discussed while Eiji Kako, Shuichi Noguchi and Norihito Ohuchi will visit in the two laboratories, individually, especially for the warm coupler assembly components.

(4) High pressure code activity in KEK (Akira Yamamoto)

- The Japan authority of the high pressure code recognized that the ILC cavity can be treated in the usual high pressure code since the volume of cavity helium vessel is small. By the permission, the procedures for submitting the documents on the high pressure code will be simplified.
- In the KEK approach, the cavity helium vessel and 2K supply helium line were separated in the cross connect pipe. In this way, the volume of the helium jacket was in the quantity on

which the usual high pressure code could be applied.

- The brief report on this issue will be described in ALCPG09, and it should be discussed if the situation can be applied on the ILC cavities worldwide.

C: This discussion can be managed in the cavity integration session.

Next meeting date

Meeting Date: 6 October 2009 22:00 (Japan time), 8:00 (FNAL), 15:00 (INFN and DESY)