DRAFT: Minutes of ML-SCRF Technology Meeting (100922)

Date & Time:
13:02-14:02 GMT, September 22, 2010, via Webex.

Participants:
H. Hayano, N. Ohuchi, C. Nantista, A. Yamamoto, N. Walker, M. Ross, W. Bialowons, R. Kephart, T. Shidara, C. Ginsburg, A. Crawford, V. Kuchler, P. Garbincius, J. Carwardine, J. Kerby

Presentation files are available at the following Indico site:
http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=4799

1) Report from Project Managers (Akira Yamamoto, Marc Ross, Nick Walker)

Akira presented a summary of the BAW-1 discussions, and the plan going forward with respect to upcoming meetings and deadlines for the GDE mid term report (see posted slides, in particular slides 11-16). The proposal recommends that we adopt the single tunnel configuration for the ILC-ML, and while not modifying the S0 goals revise the S1 gradient goal to an intermediate value, while also accepting a range of cavity gradients and modifying the RF power to accommodate this. It was noted that a clarification may be needed to note that the RF power requirement is not just the design point but the RF overhead that needs to be included in the design (and then all associated infrastructure) to operate at the gradients listed.

BAW-2, covering the e+ source location and reduced RF power scenarios, will be held January 18-21, 2011 at SLAC.

Akira introduced the upcoming effort on reviewing the status of cavity industrialization. The first step will occur at IWLC-2010, where we want to prepare a specification that can be sent to industries with experience in making cavities to get updated information on the costs associated with making on order 5000 cavities. Following meetings will focus on learning from the XFEL experience, having our plan reviewed by the PAC in November, and then involving industry next year leading up to the preparation of a revised cost estimate in the TDR.

Preparation of the interim report of 100 pages was initiated by the editing team planning to publish it next March. It is a technical report, but authoring guidelines will be iterated with ILC communicators aiming for wider distribution. Approximate page counts (35 pages for SCRF) and principal contacts for sections were identified. Individual communication will be made soon to the anticipated subsection authors/contributors. John Carwardine wondered where the S1-Global results would be included. Nick commented that it would be a new report edited in a different way and not planning to include the S1-Global results. But Norihito Ohuchi mentioned and Akira agreed that the section of cryomodule design and development would be described by utilizing the S1-Global interim results intensively.

2) Reports from Group Leaders

- **Cavity Integration (Hitoshi Hayano)**

Hitoshi reported on the S1-Global status, staring a string of good news from the three group leader reports. The cryomodule effort continues to proceed on schedule, with high power processing of the cavities starting 23 September. Akira expressed his thanks to the DESY administration for the participation of Denis Kostin in the S1-G experiment. Hitoshi also noted that the cavity fabrication facility pilot plant is coming along, and the new press has been used to form ~20 cups. These have also been inspected at KEK.

- **Cryomodule (Norihito Ohuchi)**

Norihito noted the S1 Global cryomodule successfully cooled down last week, and the data analysis is underway. It will be reported on more thoroughly at the next S1 Global webex (28 Sept).
http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=4809

- **HLRF (Chris Nantista)**

Chris, just back from LINAC10, reported briefly that the KCS waveguide had recently been powered to the field levels needed, with the only problem being with a small measurement probe. All else appeared to be OK!

3) Special Discussions

- **Request for New Cost Information (Peter Garbincius)**

Peter requested that new cost (and complete!) information should be included in the updates, and as it

becomes available be forwarded to him. There are a specific set of questions listed on slide 27 of Akira's report.

- **ILWC 2010 Agenda (Hitoshi Hayano)**

Hitoshi presented the draft agenda for WG3 and anticipated the arrangement for joint sessions with WG4 (Normal conducting ML), WG8 (Instrumentation related) and WG9 (CFS). Vic Kuchler (convener of WG9) expressed his strong desire to have a joint session with WG3 since it is the urgent need for CFS group to fix the tunnel dimensions with SCRF experts. It was decided to schedule this joint session as the last afternoon session of October 20, and Vic was asked to arrange this session including room requests to the organizer.

Bob Kephart commented that this is a good opportunity to have presentations of the FLASH/9mA experiment since many DESY people will join this workshop as well as of the CM1 test progress report from FNAL. John Carwardine also commented that it is useful to discuss the Lorentz detuning compensation results of the S1-Global experiment for the next FLASH/9mA experiment next January. Akira agreed to include these presentations and pointed out the necessity to change the session title from "S1-Global" to something like "Cryomodule Test". The relevant sessions will be rearranged accordingly and Hitoshi will take care of this rearrangement.

4) Further Plans and Meetings

Next ML-SCRF Webex meeting: 20 October, 2010, 13:00- GMT (overlapping with the SCRF Cryomodule Test Session in IWLC-10 at CERN).

IWLC 2010 (CLIC-ILC Mtg): 18-22 October, 2010 (CERN).
https://espace.cern.ch/LC2010/default.aspx

First Drafts of Mid-Term (Interim) Report from Authors: 5 November, 2010.

PAC Review (at Eugene, Oregon, USA): 11-12 November, 2010.