

## ***Draft: Minutes of ML-SCRF Technology Meeting (080709)***

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### **Date & Time:**

13:00-14:01 GMT, July 9, 2008, using WebEx.

### **Participants:**

L. Lilje, H. Hayano, N. Ohuchi, T. Peterson, C. Adolphsen, A. Yamamoto, M. Ross, N. Walker, W. Bialowons, J. Kerby, E. Paterson, N. Toge, H. Padamsee, Bob Kephart, M. Champion, B. Rimmer, S. Mishra, T. Shidara

Presentation files are available at the following Indico site;

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=2856>

### **1) Reports from PMs/APMs**

- EPAC (A. Yamamoto)

The presentation was posted at the following site:

[http://www-prism.kek.jp/~akira/ILC/EPAC-MOYBGM01\\_talk.pdf](http://www-prism.kek.jp/~akira/ILC/EPAC-MOYBGM01_talk.pdf)

The draft proceeding was posted at the following site:

<http://ilcagenda.linearcollider.org/getFile.py/access?resId=0&materialId=paper&confId=2856>

- A talk invited at Applied Superconductivity Conference to be held at Chicago, August 18-22, and to be presented by A. Yamamoto with the following title:

“Superconducting RF Cavity Development for the International Linear Collider”. It is planned to focus further research and development with introducing more single cavity study and fundamental research.

- A document to be prepared and titled: "Towards a Minimum 500 GeV Machine Definition" (M. Ross). The outline document of this subject was distributed by N. Walker and it will be discussed and is to be fully documented by November, 2008. See the presentation file “SCRF-webex-080709” for details.

### **2) Reports from GLs**

- MLI: Progress in a prototype Quad test (C. Adolphsen)

A prototype SC linac quad, acquired from CIEMAT/DESY in FY06, was tested using a custom rotating coil system in order to characterize the quad and dipole fields. The magnet center stability of the SC quad was less than 2 micron-meters with 20% field change, which is close to the ILC requirement.

Remark: On-axis wake and RF cavity kicks were computed by DESY-FNAL-SLAC collaboration.

Final results show that they are fairly benign in the ILC main linacs. (EPAC08 paper TUPP019)

- Cavity: Guide-line for fabrication/process/test; Updated "tight-loop" plan (L. Lilje)

The guideline has been agreed to be a standard/baseline in the ILC-SCRF technical area.

See the presentation file "Cavity-Fab-Proc-080707".

### **3) Discussions**

- Plug-compatible design/interface (interim summary)

- Cavity envelope (H. Hayano)

Status of the STF phase-1 and preparation discussions to meet High Pressure Vessel Code in STF phase-2 operation were presented. Kyoto-camera (Mark 2) was arrived at KEK and its test operation was done. Precise cost estimation of this system was performed using this mark-2 production experience and the cost and the name of the contact company will be distributed within a few days. As for the specification profile table of the plug compatibility, no update has been done since the FNAL-SCRF meeting in April.

- Cryomodule (N. Ohuchi)

The configuration and the interface design of the S1-Global cryomodule were presented. The cryomodule design specifications will be fixed by August, and it shall be reviewed by the concerned people. As for the plug compatibility, no update has been done since the FNAL-SCRF meeting in April.

### **4) Meeting schedule**

- SCRF WebEx Meeting: No meeting in August and the next meeting on September 3.
- TTC SCRF meeting; October in Delhi. Negotiation, in progress, with TTC-EC members to plan a joint session on the R&D programs of Indian laboratories with global cooperation (Europe, Americas and Asia) for the ILC.
- LCWS-08, GDE meeting; November 17-20 in Chicago.
- GDE meeting and AAP (interim) review will be held at Tsukuba or KEK in April (20 – 24?), 2009. It is to be fixed soon (could be shifted, a few days earlier).