

Meeting agenda and assignment

proposed by A. Yamamoto

Subject: SCRF meeting

Date and time: Jan. 18, 9:00 - 16:00

Place: DESY, Bldg. 1, Room 1.

Webex: to be provided

1. Purpose of the meeting

- Start for the technical work on the EDR R&D
- Prepare for the SCRF week (meeting) at Fermilab to determine
- Technical guideline for the EDR work
(Base-line design and plug compatible boundary conditions)
- Assign home work for the Tohoku GDE meeting and for the Fermilab meeting

2. Main topics

- Technical discussions on optimum cavity and cryomodule design
 - The design pressure of the SCRF cavity and cryomodule
- The thermal balance/budget to be optimum with or without 5 K shield
- The magnets associated with cryomodule
- Toward single design for cost optimization, with well defining interface parameters for plug-compatibility
- Home work assignment for the next meeting
- Further meeting plan for technical progress, this year

3. Agenda AM: 9:00 ~ 12:00

1) Magnet associated with the Cryomodule

- Beam-focusing and corrector magnet location and alignment
 - Requirement from accelerator system design? --- C. Adolphsen,
 - The location in cryomodule: center/end? --- C. Pagani,
 - How the magnet is to be aligned? -- N. Ohuchi,
 - Home work assignment
- Beam Position monitor integrated with magnets
 - Requirement, --- C. Adolphsen,
 - Development status at Saclay/KEK --- O. Napoli/H. Hayano
 - Home work assignment

3. Agenda AM: 9:00 ~ 12:00

2) Critical components integrated with cavities

- Coupler development and possible options
 - XFEL baseline coupler development and plan -- (from Orsay)
 - Current options and plug necessary compatibility -- H. Hayano
 - Home work assignment
- Tuner
 - Overview of the current design options --- C. Pagani and L. Lilje
 - Comments on the current design options -- S. Noguchi
 - Necessary common conditions for further development --H. Hayano
 - Home work assignment

3. Agenda PM: 13:30 - 16:00

3) Cryomodule design

- Design and cost optimization, w/wo 5 K radiation shield
 - Design experience at TTF/XFEL with 5 K shield-- DESY
 - Design experience at LHC (SC magnet) without 5 K shield--CERN
 - Thermal balance and influence to cryogenic operation --T. Peterson
 - Home work assignment

- Fundamental boundary-condition,
 - Common coordinates to be used-- N. Ohuchi and DESY
 - Design pressure of the cryomodule and cavities
 - Required conditions and design base -- T. Peterson
 - Plan for the extreme pressure test from XFEL and STF-- DESY
 - Homework assignment

3. Agenda PM: 13:30 - 16:00

3) Cryomodule design (continued)

- Interface to cavities and to external/associated system,
 - Single design for the baseline cost-estimate--N. Ohuchi/H. Carter
 - Plug compatible interface condition for alternate
 - Homework assignment

- Further meeting plan and approach to reach consensus for EDR --