

# SCRF Meeting

Report from PM

Akira Yamamoto

# Report of PAC (08/10/19-20)

- SCRF project management was reported by Akira Yamamoto and the presentation can be found at
  - <http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=2846>
- The plan has been positively received,

# CPAC lose-out Summary

Noted by Nick Walker, as follows:

- Creation of 3 PM good move and positive.
- AAP very useful move
- Schedule based on phase 1 and phase 2 was fixed by outside constraints – understood that GDE had to adapt
- Generally happy with world-wide R&D collaboration

# Colose-out Continued

- SRF: very positive about “plug compatibility” (especially for cavity). Only caution was that large flexibility that it allows must be carefully monitored (constrain the number of variants).
- S1 global a clear success and example of international collaboration
- Looking forward for schedule on S2
- General work on SRF cavities: endorse strategy on continued surface preparation R&D. Important to have good statistical data. XFEL production will help a lot in this respect.
- (SRF) Information flow between labs involved must be ensured by GDE – also to (and between) industry (obvious problems with latter are understood).

# From TTC (08/10/20-23)

- High gradient
  - Assessment for S0 program has been formally delivered to ILC-GDE and has been appreciated by ILCGDE,
  - It is planned to be drafted for the ILC news-line and a formal acknowledgement by the Director should be made,
- Plug-compatibility
  - Well received by TTC, for the R&D phase,
  - Still be partly concerned for the production/construction phase,
  - Need to explain better difference of “plug-compatibility between the R&D and production stages,

# Plan discussed for S0 in 2009: during TTC by PMs

- Understand the HAZ; electron beam weld (EBW) parameters
  - each manufacturer does it differently. (Akira and mcr [planning](#) to visit companies, [world-wide](#))
- ‘Close the loop’ on the defects before full chemistry (KEK)
  - DESY, US starting to use precision optical inspection
  - implementation of optical inspection QC cycle for XFEL industrial production?
- Identify quench-causing defects >20 MV/m
  - equator EBW HAZ? radius? crystallography / impurities (US plan...)
- Study interaction between EBW / annealing / weld strength / RRR
  - Singer et.al., TESLA 2003-07
  - [tesla.desy.de/new\\_pages/TESLA\\_Reports/2003/pdf\\_files/tesla2003-07.pdf](http://tesla.desy.de/new_pages/TESLA_Reports/2003/pdf_files/tesla2003-07.pdf)
- Present plans provide adequate cavities and treatment cycles →
  - studies and recommendations are a top priority (another request to TTC?)

# Visiting BARC (08/10/24)

- ILC-GDE visit to BARC
  - Ross, Yokoya, Kerby, Shidara, and Yamamoto
  - Gantayet (Acc. Director), Mittal (Leader), Roy, Ghodke, Dhavale
- BARC aiming at development industrial acc.,
  - Very high “in-house” effort,
- SCRF cavity development is planned with Nb-Cu lamination by using sputtering (like),
  - Superconducting properties are expected by other labs.,
- A long term cooperation program may be planned,
  - India/BARC: development of cavity
  - Another lab.: Evaluation/test

# Plan for Nov. ~ Dec., 2008

Nov. 4-6: J-Lab upgrade review (AY)

Nov. 7: Visiting FNAL/ANL

Prepare for ILC-08, specially on plug-compatibility

Nov. 16-20: ILC-08, Chicago

Plug-compatibility to be well discussed,

Nov. 21: Observe Project-X meeting at FNAL

Dec. 9-10: Visiting IHEP, Pekin U. ...