Cornell + AES Visit
22-23 + 24 February

- Takayuki Saeki, Hitoshi Inoue, Yuichi Watanabe, Yoshiyuki Funahashi (KEK), Jim Kerby (FNAL) – Cornell + AES
- Kenji Saito, Fumio Furuta (KEK) – Cornell
- Camille Ginsburg (Fermilab) – AES

- Primary purpose of the visit was information transfer between KEK and Cornell and AES regarding the current status of R&D in Japan and the current 'best practices' with regards cavity fabrication and processing for inclusion in the KEK industrialization pilot plant
- In addition a detailed report on AES001-010 and a presentation on Project X was given at AES.

Comments

Cornell:

- Cryo plant upgrade is physically 'in place'. Controls to be completed in ~1 month.
- Insert for dewar to be installed in ~2 months
- VEP facility in use, but parameters not fixed as yet. Still tuning temperature (typ 24 C) and associated process parameters. Cavities are flipped end to end during stages of VEP
- Starting to study Q0 effects for PrX; 5 cell cavities upcoming
- For their ERL cryomodules are pondering JT valves in each cryomodule based on BESSY studies; not decided yet
- Takayuki reporting on the recent MHI08 success (>37MV/m) after re processing; and low voltage EP (5V as compared to ~15V).
- Considerable discussion on the 'brown stain', and apparent correlation to introduction of new acid to the system.
- Lengthy discussion on weld region design and parameters of EBW
- I had to leave early due to weather and flight arrangements; missed the tuesday afternoon discussion

Comments

AES:

- KEK presentation in the AM and tour (slightly delayed due to overnight travel problems)
- AES infrastructure coming in place (as Allan reported). Shot peening of floor in new 5000 sq ft area in process while we were there
- Obvious interest in 650 MHz R&D; believe facility is capable to accept such cavities
- Considerable overlap between their outgoing inspection and our incoming inspection, possibility to streamline process
- Difficulty in pulling cavities out of shape when welding on reinforcing ring→led to equator weld prep being too thin in parts and blow through→first deliveries to FNAL in another ~4 weeks.

Trip to BNL planned for following day deferred due to weather.