2017 TESLA Technology Collaboration (TTC)

Tuesday, 21 February 2017

Working Groups: WG4: Cryomodule design, assembly and performance - Kellogg Center- 104AB (14:00 - 15:30)

| time | [id] title | presenter |
|-------|---|------------------------|
| 14:00 | [37] STF-2 cryommodule - module assembly, alignment, installation | Dr YAMAMOTO, Yasuchika |
| 14:15 | [38] LCLS-II CM Mechanical Design | GRIMM, Chuck |
| 14:30 | [39] LCLS-II Assembly | ARKAN, Tug |
| 14:45 | [40] FRIB Cryomodule Design | Mr MILLER, Samuel |
| 15:00 | [41] Design of low-beta cryomodule and development at CEA | Mr BAZIN, Nicolas |
| 15:15 | [42] TBD | |

Working Groups: WG1: Performance Frontier - Kellogg Center- 103AB (14:00 - 15:30)

| time | [id] title | presenter |
|-------|---|--|
| 14:00 | [25] Session Intro | Dr GRASSELLINO, Anna RESCHKE, Detlef Prof. LIEPE, Matthias |
| 14:05 | [26] Low T N doping / N infusion cavity development at DESY | Dr WENSKAT, Marc |
| 14:20 | [27] Low T N doping understanding - smaples studies (in situ XRR) | Mr DALLA LANA SEMIONE, Guilherme |
| 14:35 | [28] New insides into low temperature doping | KOUFALIS, Peter |
| 14:55 | [29] The Importance of the Electron Mean Free Path for Superconducting Radio-Frequency Cavities | Mr MANISCALCO, James |
| 15:10 | [30] Field dependence of surface resistance - experimental | Ms MARTINELLO, Martina |

Working Groups: WG4: Cryomodule design, assembly and performance - Kellogg Center- 104AB (16:00 - 17:30)

| time | [id] title | presenter |
|-------|---|---------------------|
| 16:00 | [43] Status of ESS medium and high beta cryomodules at CEA | Mr TRUBLET, Thierry |
| 16:15 | [120] FRIB Coldmass Assembly | Mr VICTORY, Daniel |
| 16:30 | [44] FRIB Cryomodule Assembly | Mr COMPTON, Chris |
| 16:45 | [45] Cryomodule Assembly experience - CEBAF/LCLS | DRURY, Mike |
| 17:00 | [46] Design and fabricaton status of RIKEN - SC Cryomodules | Dr OZEKI, Kazutaka |
| 17:15 | [47] Summary of discussion on talks and discussion | |

Working Groups: WG1: Performance Frontier - Kellogg Center- 103AB (16:00 - 17:30)

time [id] title

2017 TESLA Technology Collaboration (TTC) / Programme

| 16:00 | [32] Low temperature doping at FNAL | Dr GRASSELLINO, Anna |
|-------|--|----------------------|
| 16:20 | [33] JLAB doping talk | Dr PALCZEWSKI, Ari |
| 16:40 | [34] KEK doping talk | Prof. KAKO, Eiji |
| 16:55 | [35] First LCLS2 production cavity results with N doping | Dr GONNELLA, Dan |
| 17:15 | [36] Discussion | |

Wednesday, 22 February 2017

Working Groups: WG1: Performance Frontier - Kellogg Center- 103AB (09:00 - 10:30)

| time | [id] title | presenter |
|-------|---|--|
| 09:00 | [48] Session Intro | Dr GRASSELLINO, Anna RESCHKE, Detlef Prof. LIEPE, Matthias |
| 09:05 | [49] On trapped flux losses (theory) | CHECCHIN, Mattia |
| 09:20 | [50] On variability of flux trapping (cavity, experimental) | POSEN, Sam |
| 09:35 | [51] Flux expusion variability with vendor material batches | Dr PALCZEWSKI, Ari |
| 09:50 | [52] Vendor talk - address questions | Mr O'LAREY, Phil |
| 10:00 | [53] Vendor talk - address questions | Mr UMEZAWA, Hiroaki |
| 10:10 | [54] Vendor talk - address questions | |
| 10:20 | [55] Discussion | |

Working Groups: WG4 : Cryomodule design, assembly and performance - Kellogg Center- 104AB (09:00 - 10:30)

| time | [id] title | presenter |
|-------|--|----------------|
| 09:00 | [56] LCLS-LL Installation Plans | Mr COY, Robert |
| 09:20 | [57] LCLS-II protype tests | Dr WU, Genfa |
| 09:35 | [58] C-ADS injector cryomoudle; design, assembly, and commissioning | Dr HE, Feisi |
| 09:50 | [59] Microphonic studies of CEBAF C100 and LCLS II prototype cryomodules | Mr POWERS, Tom |
| 10:10 | [60] Discussion | |

Working Groups: WG4 : Cryomodule design, assembly and performance - Kellogg Center- 104AB (11:00 - 12:30)

| time | [id] title | presenter |
|-------|--|------------------------|
| 11:00 | [61] FRIB Cryomodules testing experience | POPIELARSKI, John |
| 11:20 | [62] STF-2 cryomoudl- heat load, x-ray, and Lorenz detuning measurements | Dr YAMAMOTO, Yasuchika |
| 11:35 | [119] Summary of talks and discussion | |

Working Groups: WG1: Performance Frontier - Kellogg Center- 103AB (11:00 - 12:30)

| time | [id] title | presenter |
|-------|---|--|
| 11:00 | [66] Session Intro | Dr GRASSELLINO, Anna RESCHKE, Detlef Prof. LIEPE, Matthias |
| 11:05 | [67] Reccent advances on high Q0 Nb3Sn cavities | Mr HALL, Daniel |
| 11:25 | [68] Insightes into multilayers and new materials from muSR | Dr JUNGINGER, Tobias |
| 11:40 | [69] Thought of perfect resolution of high field Qslop with BCP'ed cavities | Ms LUO, Didi |
| 11:55 | [70] Updates on ingot niobium technology and its applications | Dr MYNENI, Ganapati |

12:10 [72] Discussion

<u>Working Groups: WG3: Cavities (Fabrication and Processing), Tuners and Couplers</u> - Kellogg Center- 104AB (14:00 - 15:30)

| time | [id] title | presenter |
|-------|---|---------------------|
| 14:00 | [79] XFEL cavity procurment strategy, lesson learned | RESCHKE, Detlef |
| 14:15 | [80] LCLS-II cavity procurement stratege and status | Dr PALCZEWSKI, Ari |
| 14:30 | [82] ESS cavity procurement via in-kind contributions | Dr SCHLANDER, Felix |
| 14:45 | [81] ESS high-beta cavity procurement and quality control in the UK | Mr ELLIS, Mike |
| 15:00 | [83] CEA medium/high-beta ESS cavity results | Dr BERRY, Stéphane |
| 15:15 | [84] Discussion on procurement strategies | |

Working Groups: WG2: Performance degradation, care, beamline quality - Kellogg Center- 103AB (14:00 - 15:30)

| time | [id] title | presenter |
|-------|--|------------------------|
| 14:00 | [73] Summary of previous meeting about VTA vs cryomodule (E-XFEL(mainly), C100, FRIB, STF2) | Dr SAKAI, Hiroshi |
| 14:15 | [74] Field emission statistics for first production LCLS2 cavities and comparison (including setups) to XFEL | Dr ADERHOLD, Sebastian |
| 14:30 | [75] STF2 Cryomodule degradation | Dr YAMAMOTO, Yasuchika |
| 14:45 | [76] IMP results about VTA vs cryomodule | LI, Yongming |
| 15:00 | [78] ANL Experience VTA vs cryomodule | CONWAY, Zachary |
| 15:15 | [77] Short discussion about results of VTA vs cryomodule | |

Working Groups: WG2: Performance degradation, cure, beamline quality - Kellogg Center- 103AB (16:00 - 17:30)

| time | [id] title | presenter |
|-------|--|-------------------------------|
| 16:00 | [91] First result of LCLS2 CM, Q0 studies as function of cooldown | Dr WU, Genfa |
| 16:15 | [92] Experience with magnetic hygiene and in situ demagnetization to achieve < 2mGauss in CM | Dr CHANDRASEKARAN, Saravan |
| 16:30 | [94] Measurement of the magnetization of each component in KEK | Prof. KAKO, Eiji |
| 16:45 | [95] Long discussion about degradation after VTA | |

<u>Working Groups: WG3: Cavities (Fabrication and Processing), Tuner and Couplers</u> - Kellogg Center- 104AB (16:00 - 17:30)

| time | [id] title | presenter |
|-------|---|---------------------|
| 16:00 | [89] Production of medium beta cavities for ESS | Dr MICHELATO, Paolo |
| 16:15 | [85] Procurement of HWR for SARAF via CEA | Dr MADEC, Catherine |
| 16:30 | [86] QWR cavity fabrication, processing and VT results | Dr OZEKI, Kazutaka |
| 16:45 | [87] Production of the CADS spoke cavities and ancillaries, and lessons learned | Dr HE, Feisi |

| 17:00 | [88] Production of HWR cavity and ancillaries, and lessons learned | LI, Yongming |
|-------|--|--------------|
| 17:15 | [90] Discussion | |

Thursday, 23 February 2017

<u>Working Groups: WG3: Cavities (Fabrication and Processing), Tuners and Couplers</u> - Kellogg Center- 104AB (09:00 - 10:30)

| time | [id] title | presenter |
|-------|--|----------------------|
| 09:00 | [96] Prototying experience for the LHC Crab cavities | VERDÚ-ANDRÉS, Silvia |
| 09:15 | [97] Fabrications of superconducting spoke cavity for electron beam acceleration | Dr SAWAMURA, Masaru |
| 09:30 | [98] Dual asynmetric RF-cavity for FEL-design and preliminary experiments | Prof. KONOPLEV, Ivan |
| 09:45 | [100] Technical issues of QWR, HWR, and their ancillaries at RISP | Dr SHIN, ILKYOUNG |
| 10:00 | [99] Comparison of CH, QWR, HWR with performance and cost | Dr XU, Mengxin |
| 10:15 | [101] Discussion | |

Working Groups: WG2: Performance degradation, cure, beamline quality - Kellogg Center- 103AB (09:00 - 10:30)

| time | [id] title | presenter |
|-------|--|--------------------|
| 09:00 | [106] ReA SRF peration experience over several years | ZHAO, Qiang |
| 09:14 | [105] Performance degradation and recovery of ISAC-II quarter wave cavities during operation | JUNGINGER, Tobi |
| 09:28 | [103] Longterm operation and its care to keep performance in CEBAF (including Helium processing) | DRURY, Mike |
| 09:42 | [104] Plasma processing for SNS cryomodule | Dr KIM, SANG-HO |
| 09:56 | [102] Plasma Processing setup for LCLS2 at FNAL | Mr BERRUTTI, Paolo |
| 10:10 | [107] Discussion about effort to maintain and improve cryomodule performance | |

<u>Working Groups: WG3: Cavities (Fabrication and Processing), Tuners and Couplers</u> - Kellogg Center- 104AB (11:00 - 12:30)

| time | [id] title | presenter |
|-------|---|-------------------------|
| 11:00 | [108] Multipacting free coupler design and commissioning for FRIB | |
| 11:15 | [109] FRIB HWR tuner development | Dr STARK, Sergey |
| 11:30 | [111] High power coupler design for eRHIC | CHEN, Xu |
| 11:45 | [110] LCLS-II coupler | Dr SOLYAK, Nikolay |
| 12:00 | [112] Experience of the KEK biased high power coupler operation | Prof. MITSUNOBU, shinji |
| 12:15 | [113] ILC soupler development with TiN coating free ceramics | Dr YAMAMOTO, Yasuchika |

Working Groups: WG2: Performance degradation, cure, beamline quality - Kellogg Center- 103AB (11:00 - 12:30)

| time | [id] title | presenter |
|-------|--|--------------------|
| 11:00 | [114] E-XFEL clean room procedure and QC steps | Dr BERRY, Stéphane |

| 11:20 | [115] Clean room procedures and QC steps that FRIB adopts for assembly of low beta CMs | Mrs POPIELARSKI, Laura |
|-------|---|------------------------|
| 11:40 | [116] Study on the choice of isolation valves for the FRIB cryomodules | OJA, Byron |
| 11:55 | [117] Presentation describing the clean room procedures and QC steps that ANL adopts for assembly of low beta CMs | CONWAY, Zachary |
| 12:10 | [118] Discussion on clean works procedure including instrumentation preperation | |