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Status of fabrication of ILC prototype SRF cavities at KEK

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In the scope of the MEXT ATD and the ILC Technology Network (ITN) an ILC prototype cavities are currently being fabricated at KEK and at a vendor. The main Nb material for the central cell-part of cavity are conventional Fine-Grain (FG) Nb and newly introduced Medium-Grain (MG) Nb. We already fabricated four FG-Nb and two MG-Nb 1.3-GHz single-cell cavities. Our plan is to fabricate five FG-Nb and two MG-Nb 1.3-GHz 9-cell cavities in Cavity Fabrication Facility (CFF) in-house at KEK, and two FG-Nb 1.3-GHz 9-cell cavities in a vendor. After fabrication of these 9-cell cavities, all of them will be installed into the cryomodule and high-power test should be performed. Therefore, the fabrication of these 9-cell cavities should be complied with the High-Pressure Gas Safety (HPGS) regulation in Japan. The current status of fabrication of these cavities will be reported in this presentation.

Author: SAEKI, Takayuki (KEK)

Co-authors: YAMAMOTO, Akira; KUMAR, Ashish (KEK); VIKLUND, Eric (KEK); ARAKI, Hayato (KEK High Energy Accelerator Research Organization (JP)); Dr ITO, Hayato (KEK); SAKAI, Hiroshi (KEK); Mr INOUE, Hitoshi (KEK); UMEMORI, Kensei (KEK); Prof. HIRAKI, Masahiko (KEK); Mr EGI, Masato (KEK); Dr OMET, Mathieu (High Energy Accelerator Research Organization (KEK)); BAJPAI, Rishabh (KEK); UEKI, Ryuichi (KEK); SHANAB, Safwan (KEK); MICHIZONO, Shinichiro (KEK); ARAI, Sora (KEK); HARA, Takafumi (KEK); KUBO, Takayuki (KEK/SOKENDAI); DOHMAE, Takeshi; GOTO, Takeyoshi; YAMADA, Tomohiro (KEK); MATSUMOTO, Toshihiro; YAMAMOTO, Yasuchika (KEK); ARIMOTO, Yasushi (KEK); Mr WATANABE, Yuichi (KEK); NAKANISHI, kota (KEK); KATAYAMA, ryo (kek)

Presenter: SAEKI, Takayuki (KEK)

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