



KEK Status Report

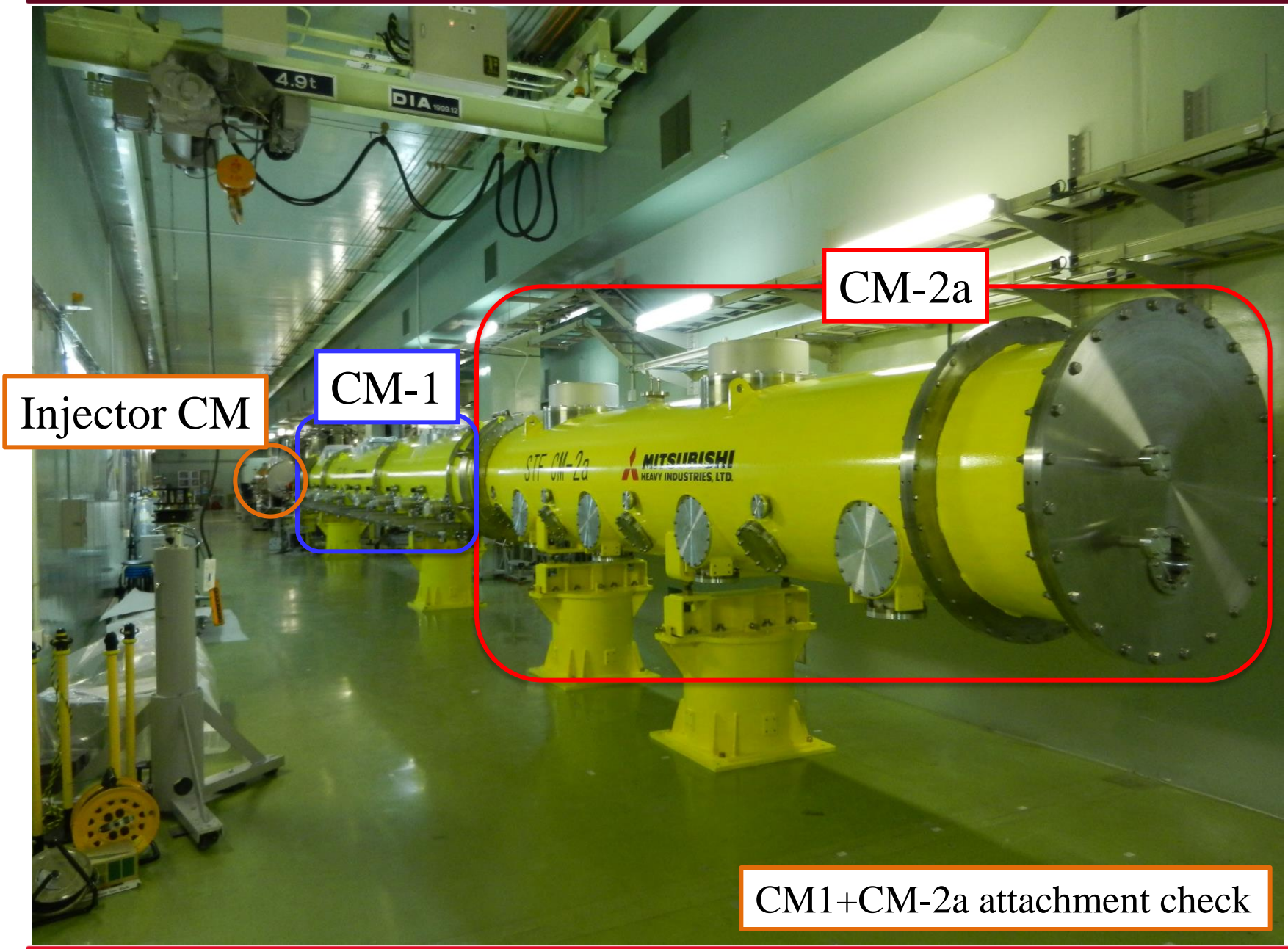


STF/CFF Status

- STF-2 Cryomodule (CM-1; 8 cavities & Q-magnet, CM-2a; 4 cavities)
 - CM-1 assembly was already done
 - CM-2a (half size) assembly is on going and will finish by end of May
 - Cavity string assembly for MHI-23~-26 was done
 - First cool-down will start from Autumn
 - 9-cell Cavity
 - First vertical test for KEK-01 will be done tomorrow (Saeki-san)
 - MHI-D cavity will be fabricated/tested for check of technology improvement → **delayed**
 - MHI-27~-30 will be fabricated/tested after above check → **delayed**
 - Others (1-cell cavity and magnetic shield study)
 - Magnetic shield study is on going in vertical cryostat (Tsuchiya-san/Masuzawa-san)
 - V.T. for large grain 1-cell cavity (In-house) was done twice (Umemori-san/Kubo-san)
 - Yamanaka-san presented the plan for cavity fabrication in F.Y. 2014.
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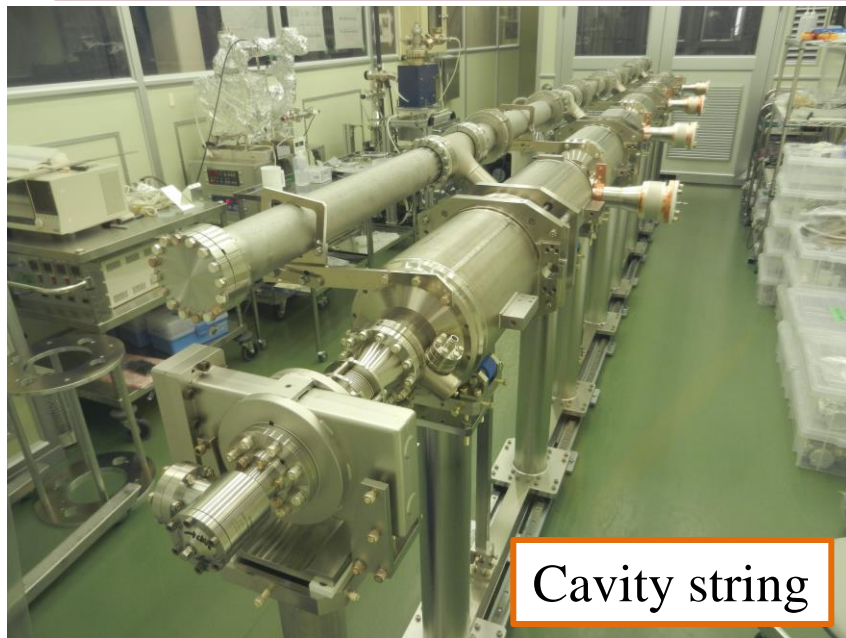


CM-1+CM-2a in STF-2





Assembly of CM-2a



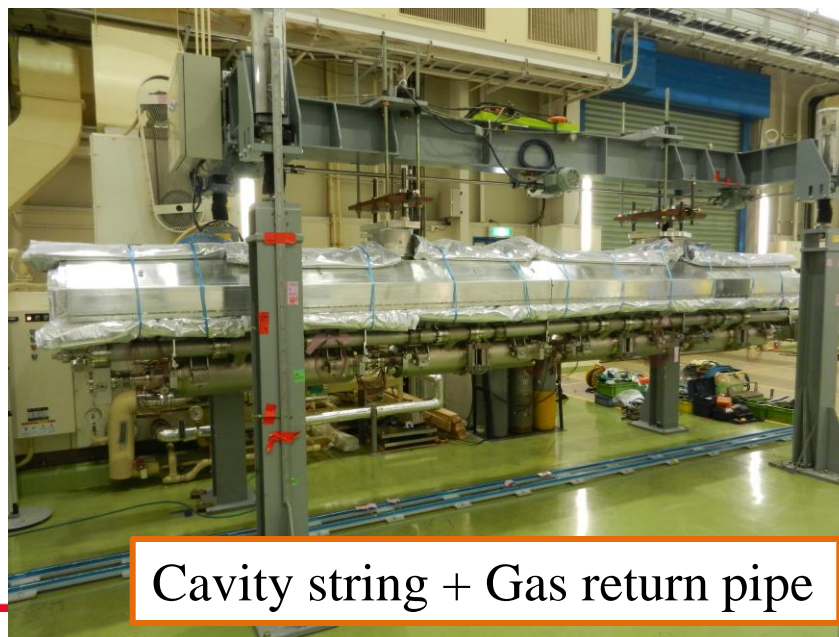
Cavity string



Tuner setting



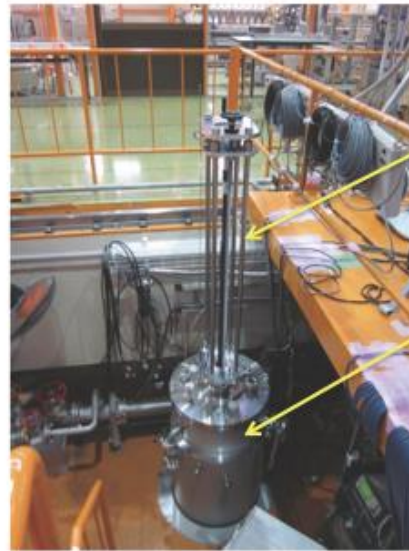
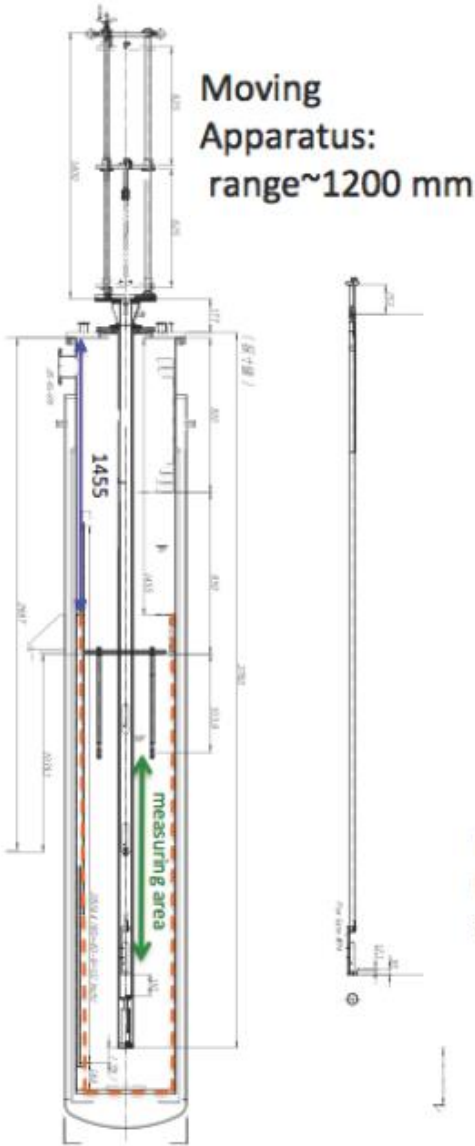
Gas return pipe



Cavity string + Gas return pipe



1) Set-up



Experiment place
(Upper part of the 3.5 m long cryostat
and the moving apparatus)

Warm tube and cavity-shield
suspended from the cryostat top plate



TTC-WG7 DESY, March 2014



1. Vendor A : 2~2.8 mG @4K
2. Vendor B : 5~14 mG @4K
3. Double shield : ~2 mG @4K

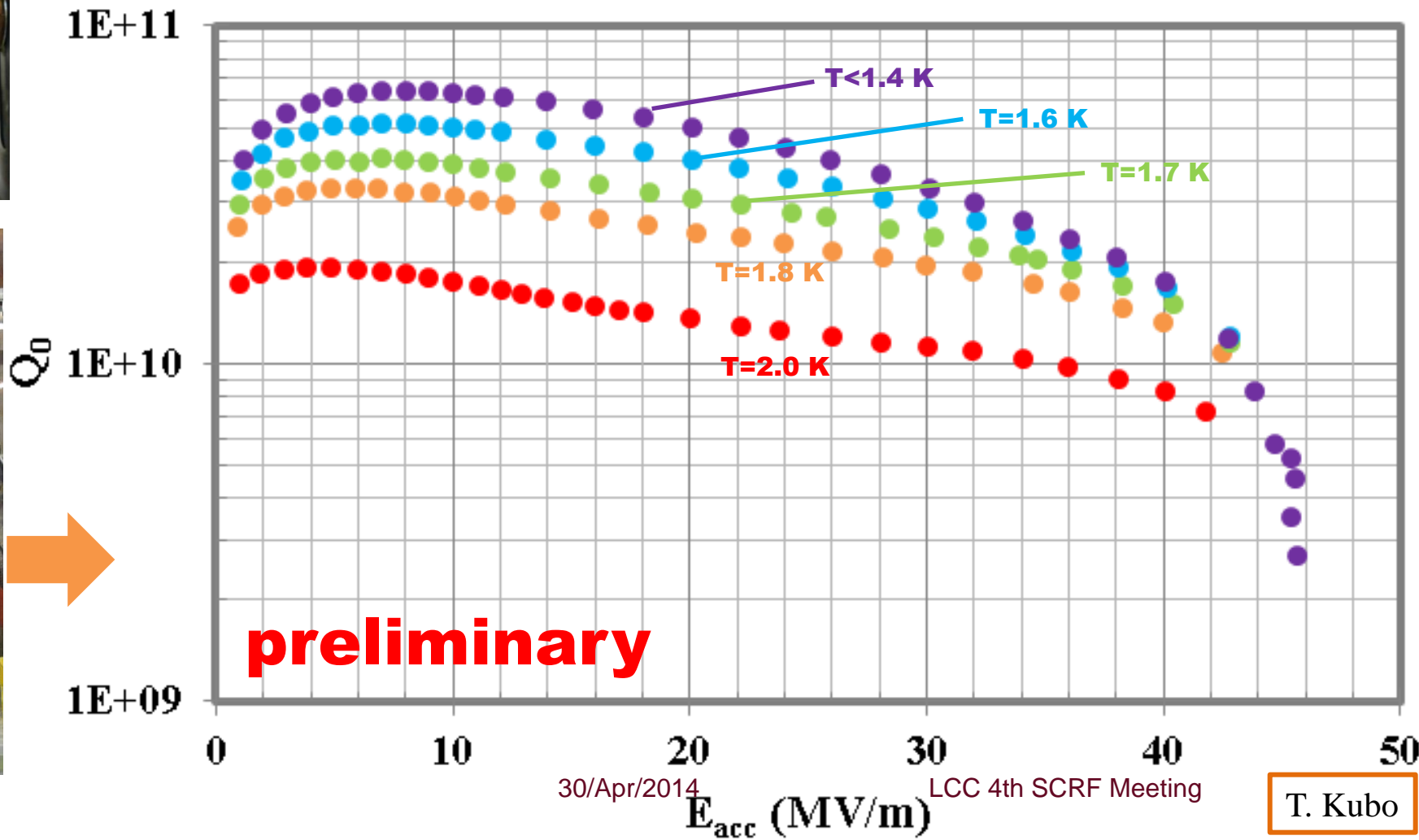
※ Geomagnetic field : 500~650 mG @R.T.

※ There is no difference between 4K and 2K.



In-house production of large-grain 1-cell cavity

KEK-R1





Cavity name	Cavity type	Comment
KEK-0	9-cell	Prototype, w/o HOM couplers
KEK-1	9-cell	1 st V.T. will be done tomorrow
KEK-2	9-cell	In plan, full cavity package, HPC
KEK-3	9-cell	In plan, full cavity package, HPC
KEK-R1	1-cell (L.G.)	V.T.s were done twice
KEK-R2	1-cell	Almost same as KEK-R1, but F.G.
KEK-R3	3-cell	Improvement for dumbbell fabrication
KEK-R4	1-cell	Nb sheet by new vendor is used
KEK-R5	1-cell (L.G.)	Low RRR (<200) sheet is used
KEK-W1	Seamless	CBP was done at FNAL
KEK-W2	Seamless	Under fabrication
KEK-U4	Seamless	In plan



Thank you