

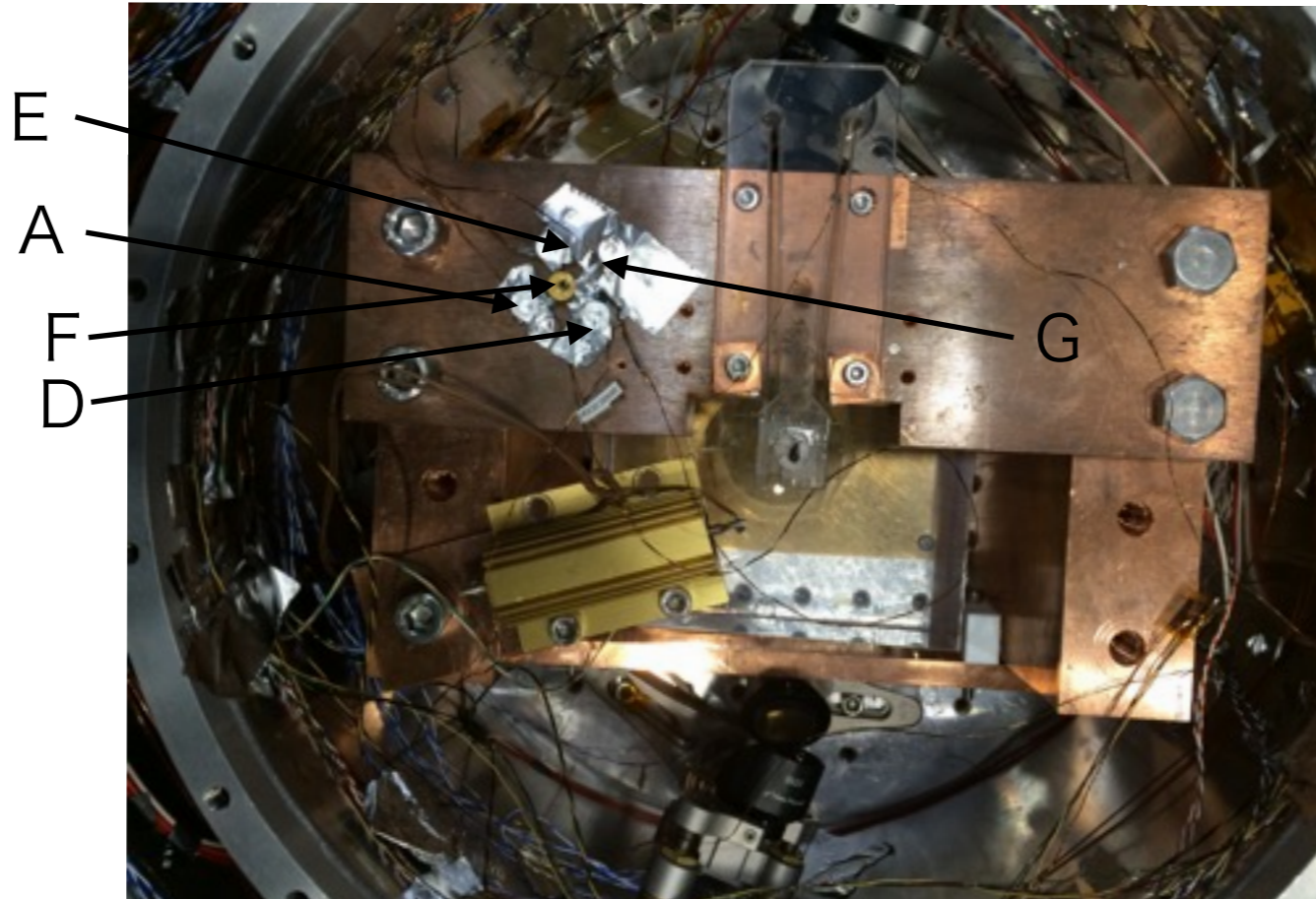
My work in 2016

5-2

Hiroki Tanaka

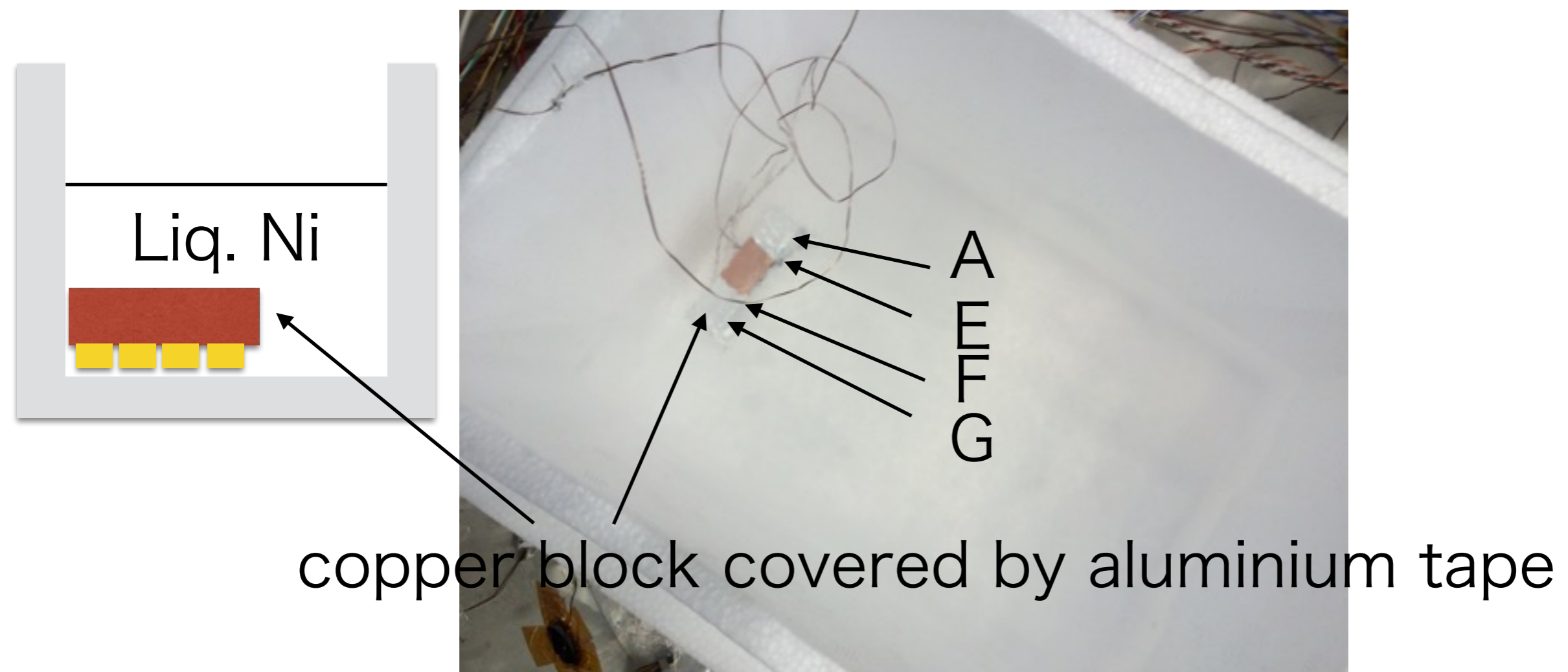
First calibration test(previous)

We cooled down the cryostat.



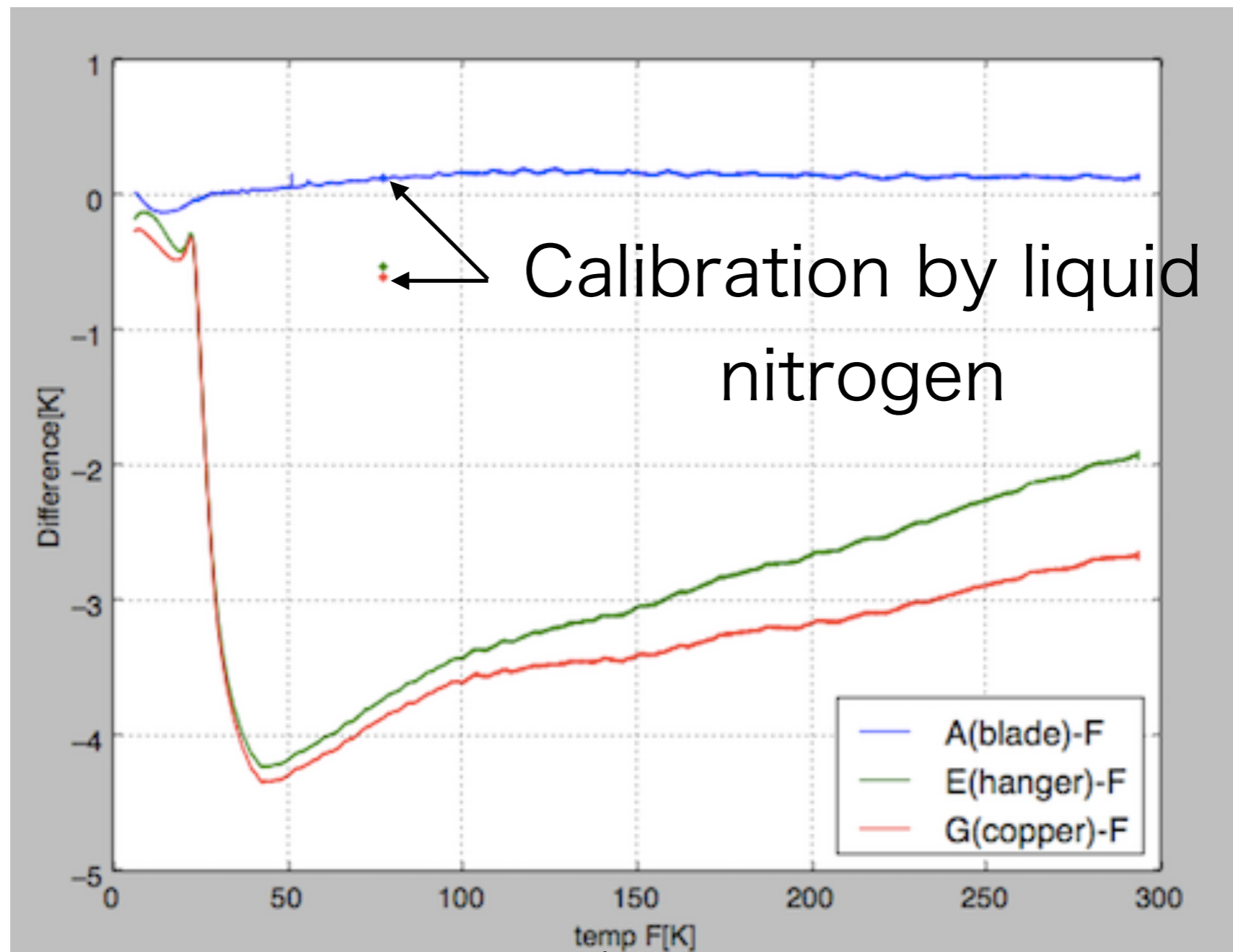
Calibration by liquid nitrogen

I attached the sensors on the small copper block by varnish. Then I installed the liquid nitrogen into the box.



Comparing two calibration

The graph...last calibration

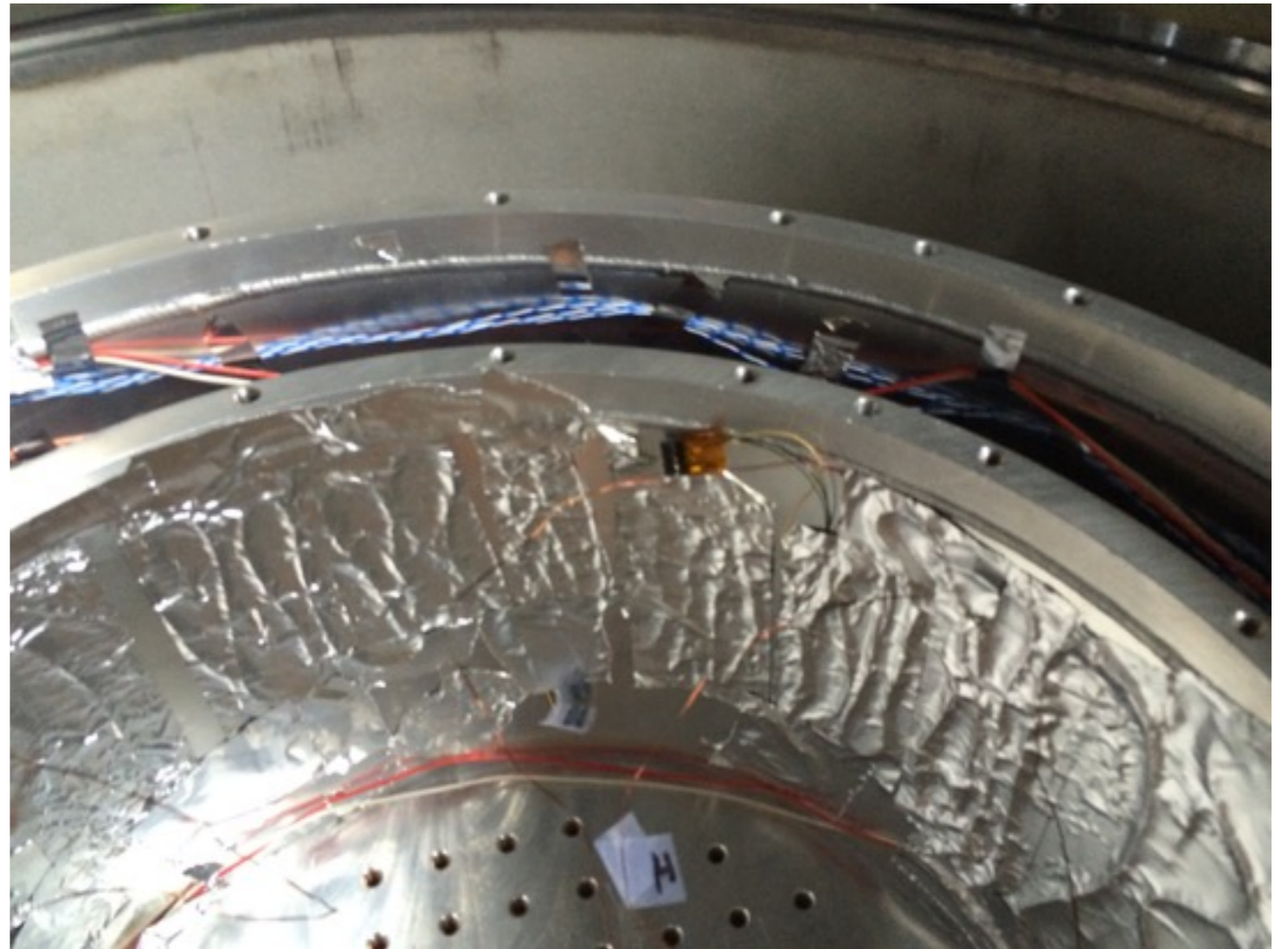
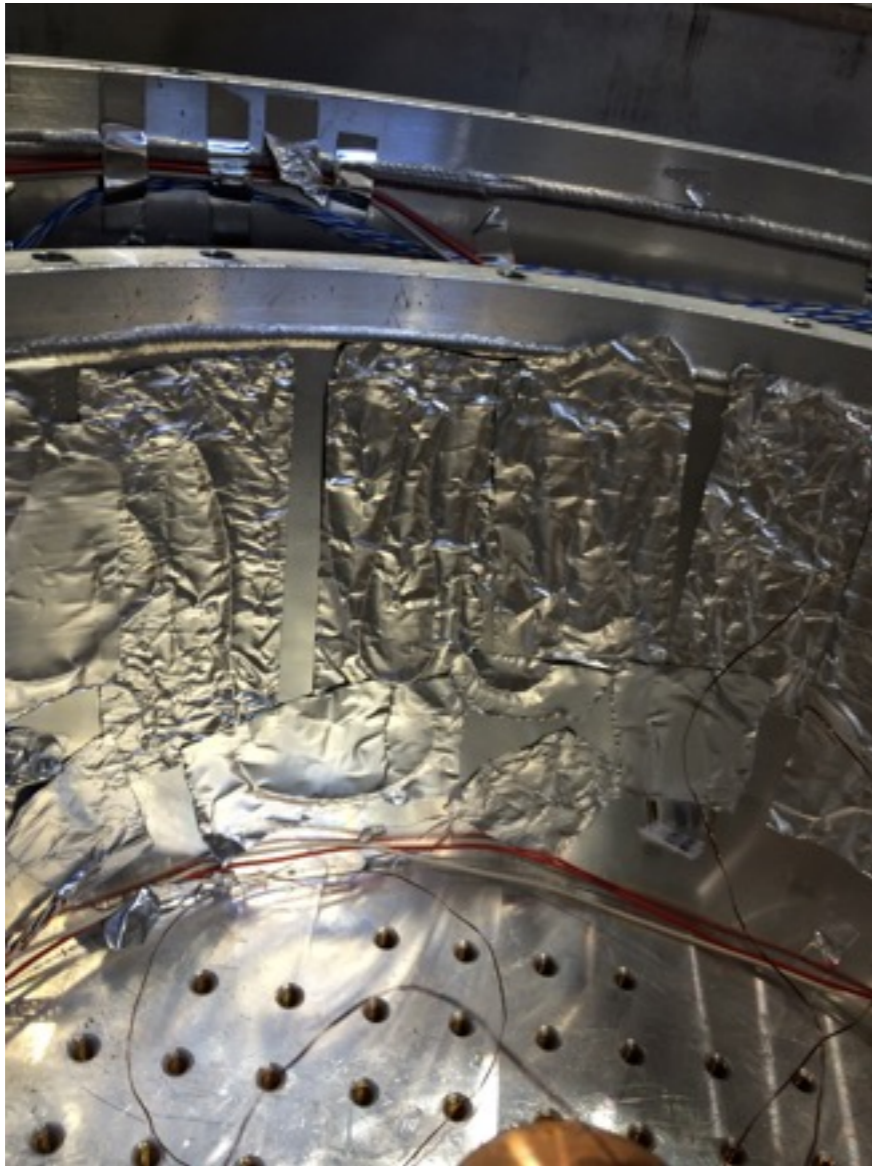


Calibration

- First we thought some points of the connections of the cables had trouble.
- I checked all connections of all sensors.

Heat sink

I arranged the heat sink.



Calibration

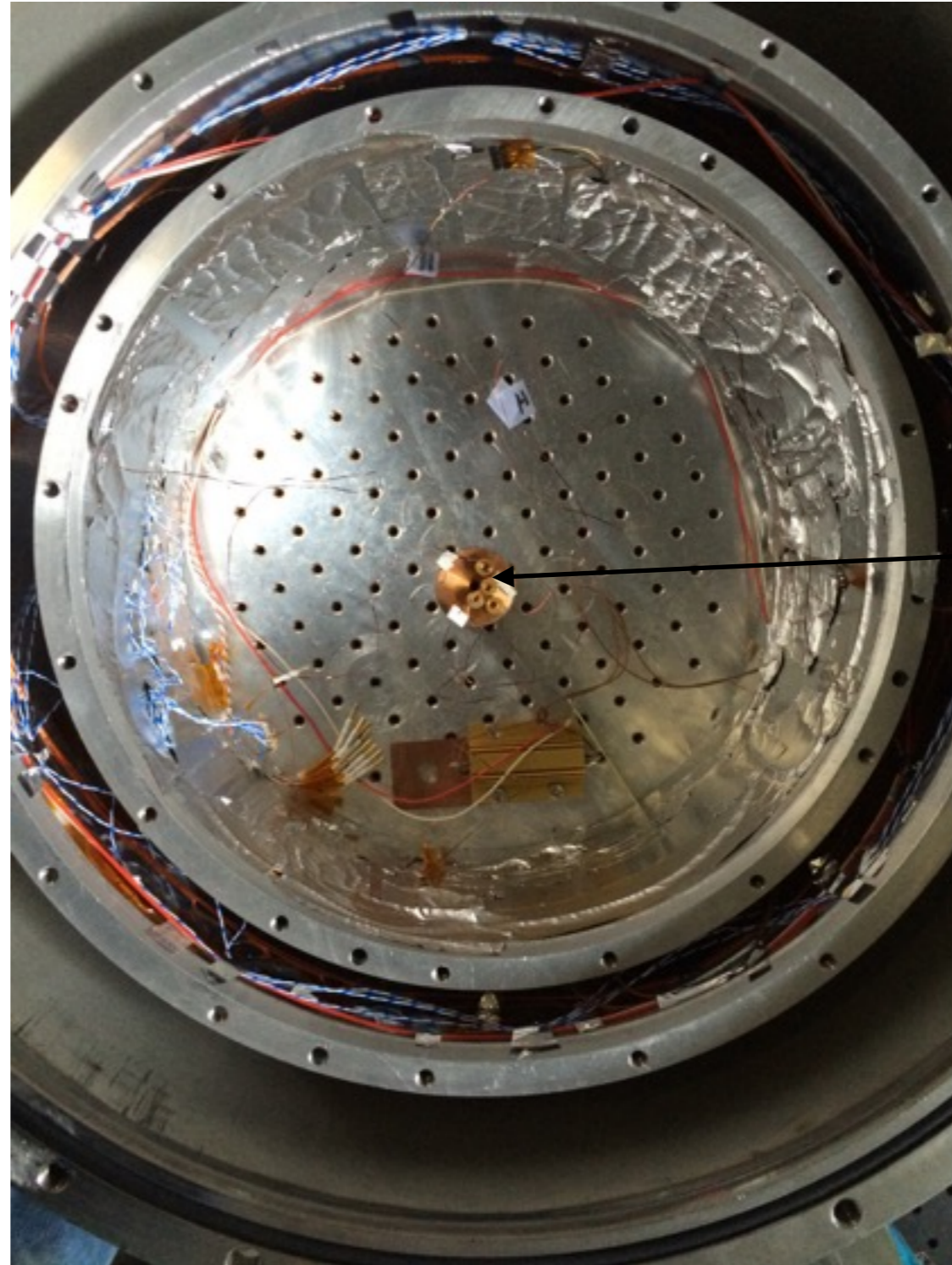
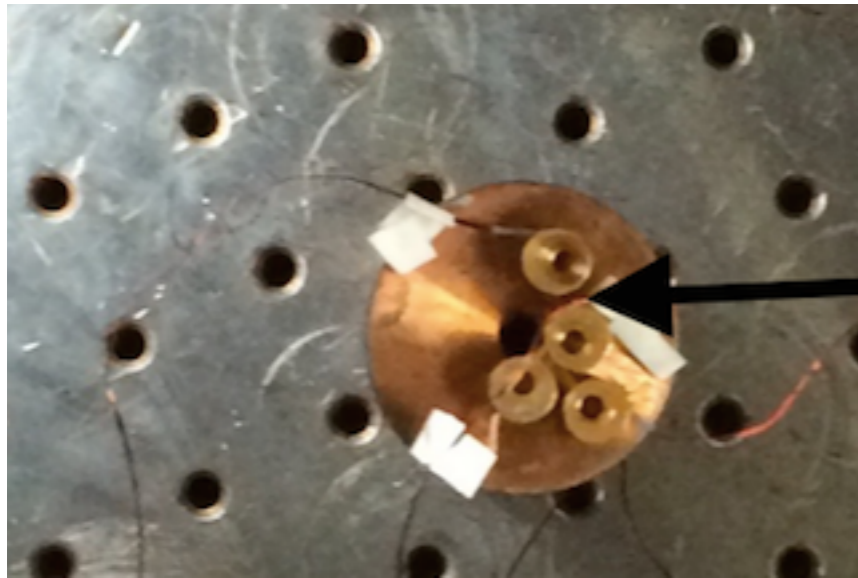
- However the difference of the temperature between sensor G and sensor F remained about 2.5K.

New sensors

- I found three temperature sensors in clean booth of 101 room (sensors H,I,J).
- F(calibrated) 284.85K H 285.20K I 285.23K J
284.76K E 282.96K G 282.32K
- We decided to use sensors H and J instead of E and G.

Calibration test

I started to cool down the cryostat.



sensors
A,F,H,J

Liquid nitrogen

- Last time, Yamamoto-sensei borrowed the tank from ISSP (Sagiyama-san).



Liquid nitrogen

- She said they can't lend it to us more than once.
- Can I borrow the tank from KEK?

homework

- In order to check LS218, I gave the current ($10\mu A$) to the sensors by this machine and measured their voltage.

The results were exactly equal to the voltage shown on LS218.

So LS218 doesn't have problem.

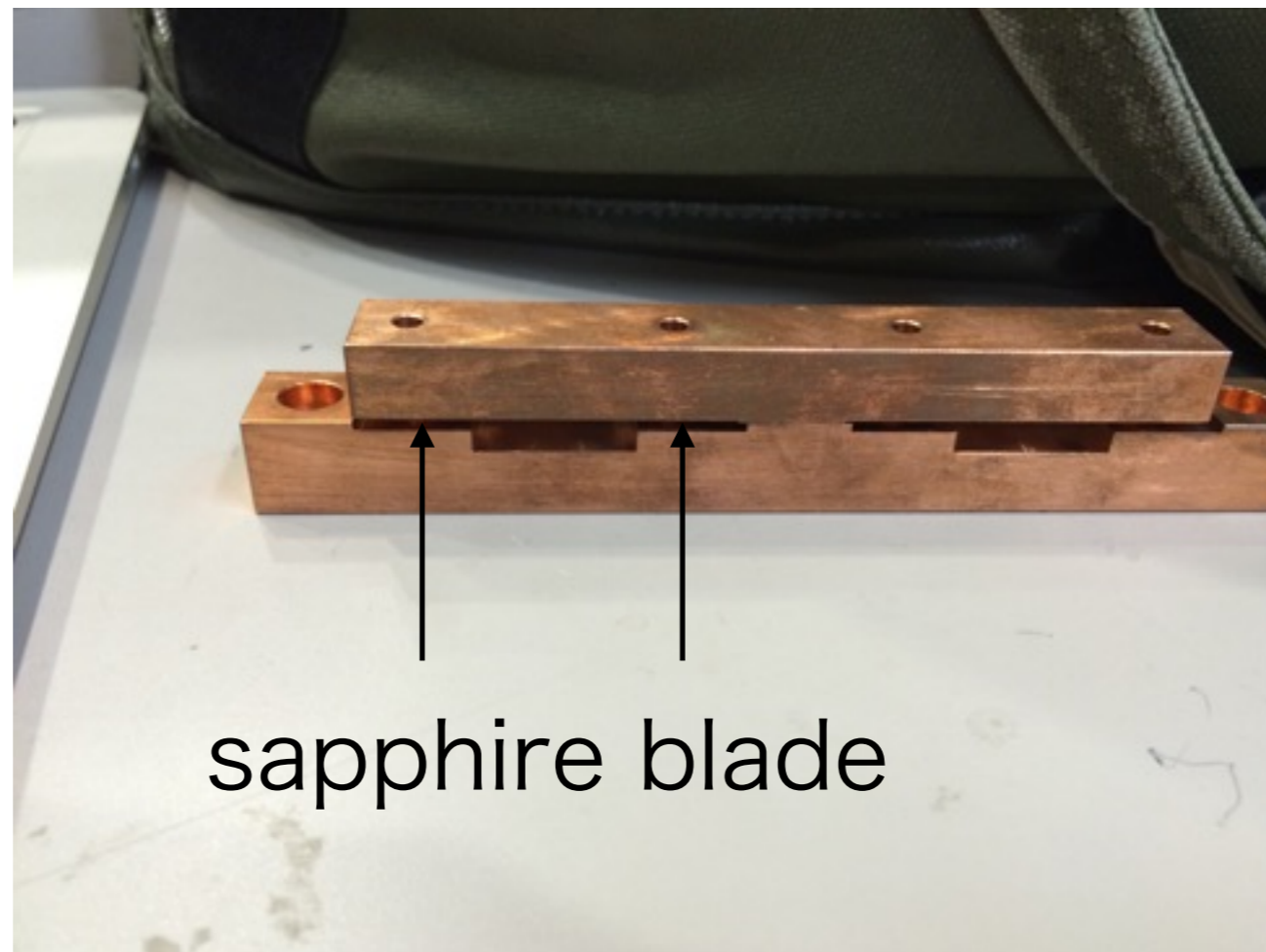


Future work

- After calibration, we will do the heat load test again.
- Now we know that the difference of the temperature between the blade and the copper support is too large.

Future work2

- This time, we will use the clamp below.



JPS in autumn

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