

# My work in 2015

4-3

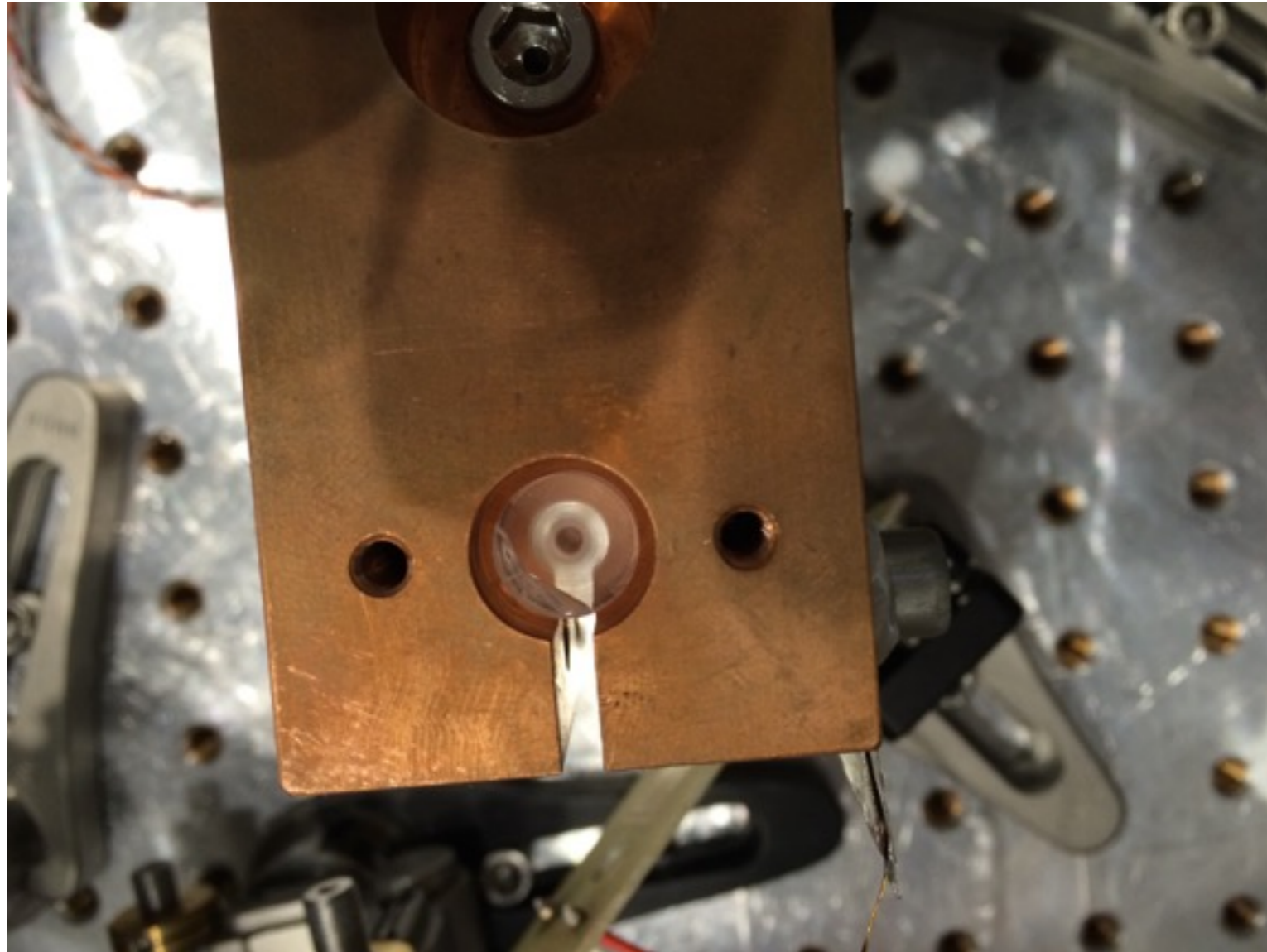
Hiroki Tanaka

# Q measurement

- <So far>
- we rotated the head at room temperature by 90 degrees and measured Q-value of each case.
- Then we set the direction of the head of the fiber as Q-value is the highest and then cooled down the cryostat.
- <Now>
- I will check whether Q-value is higher in cryogenic temperature if the direction of the head is set as Q-value is higher in room temperature.
- I rotated the head of the fiber by 90 degrees.

# Accident

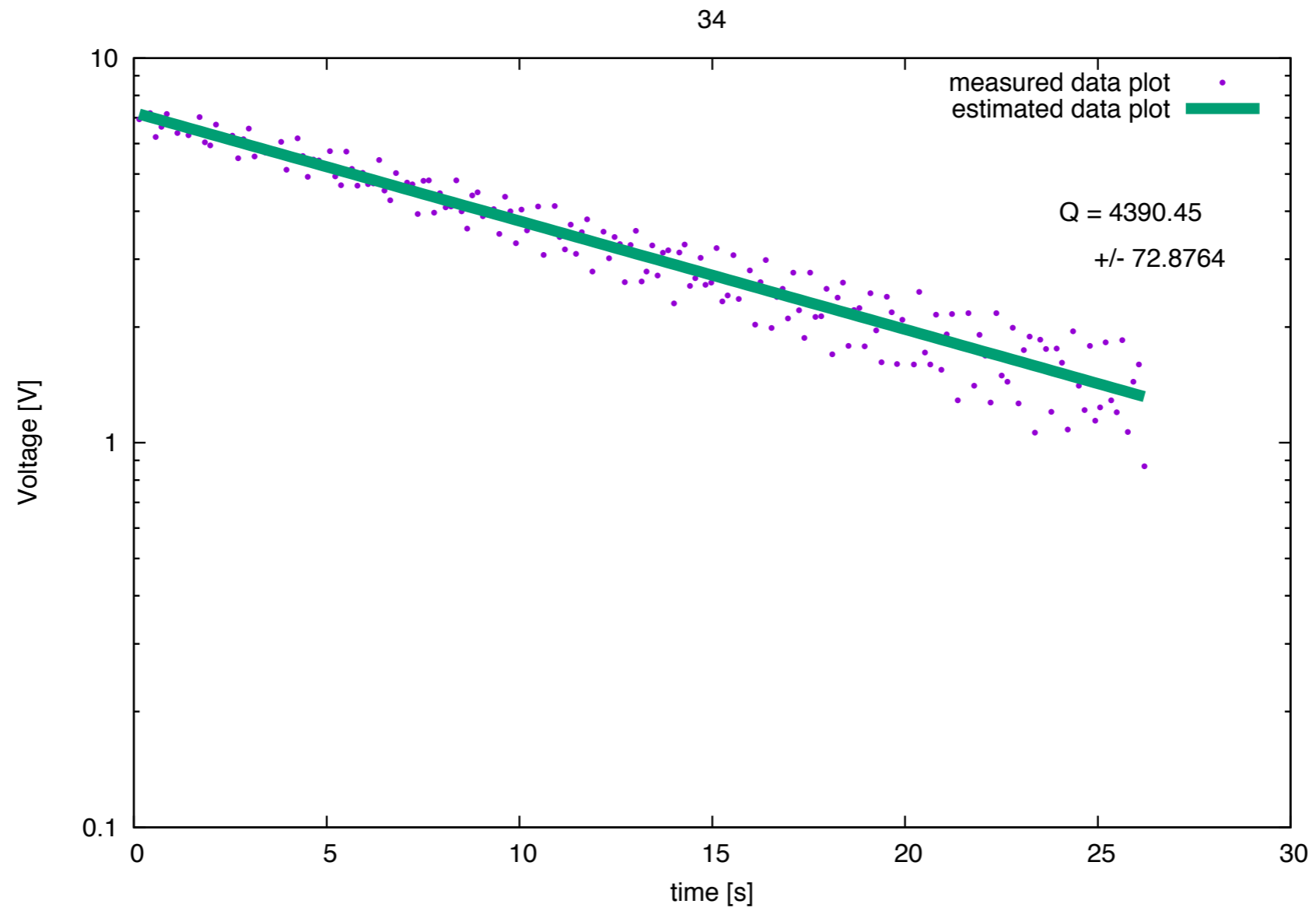
- I found the head was broken.



# Q measurement

- Position 1:300K:Q=4180(5K:7.4 × 10<sup>5</sup>)
- Position 2:300K:Q=4280
- Position 3:300K:Q=4130
- Position 4:300K:Q=4260~4390(but  $\Delta Q/Q=1\sim 2\%$ )

# Ringdown of position 4



# future work

- I will extend the cryostat and measure the Q-value of the 350mm fiber.
- What will the fresh students do this week?