

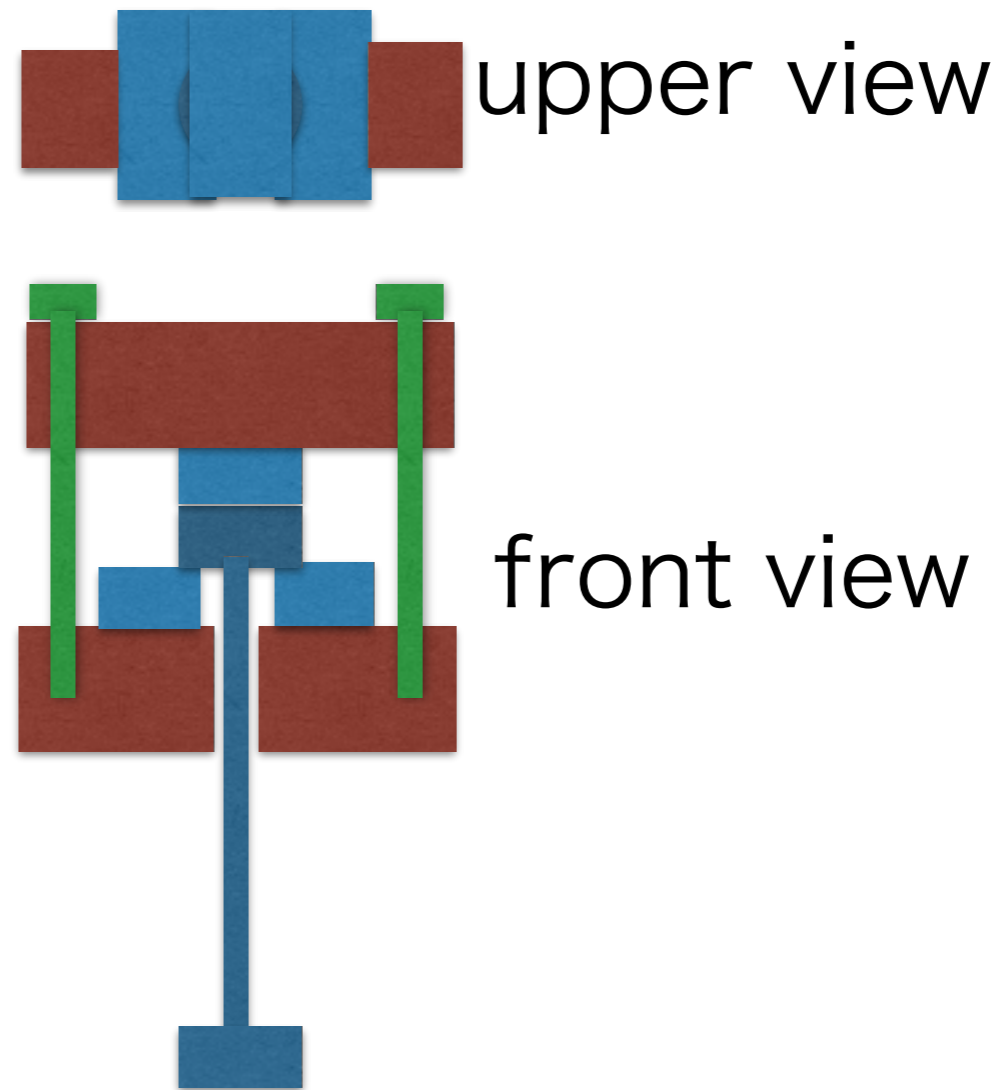
# My work in 2015

5-3

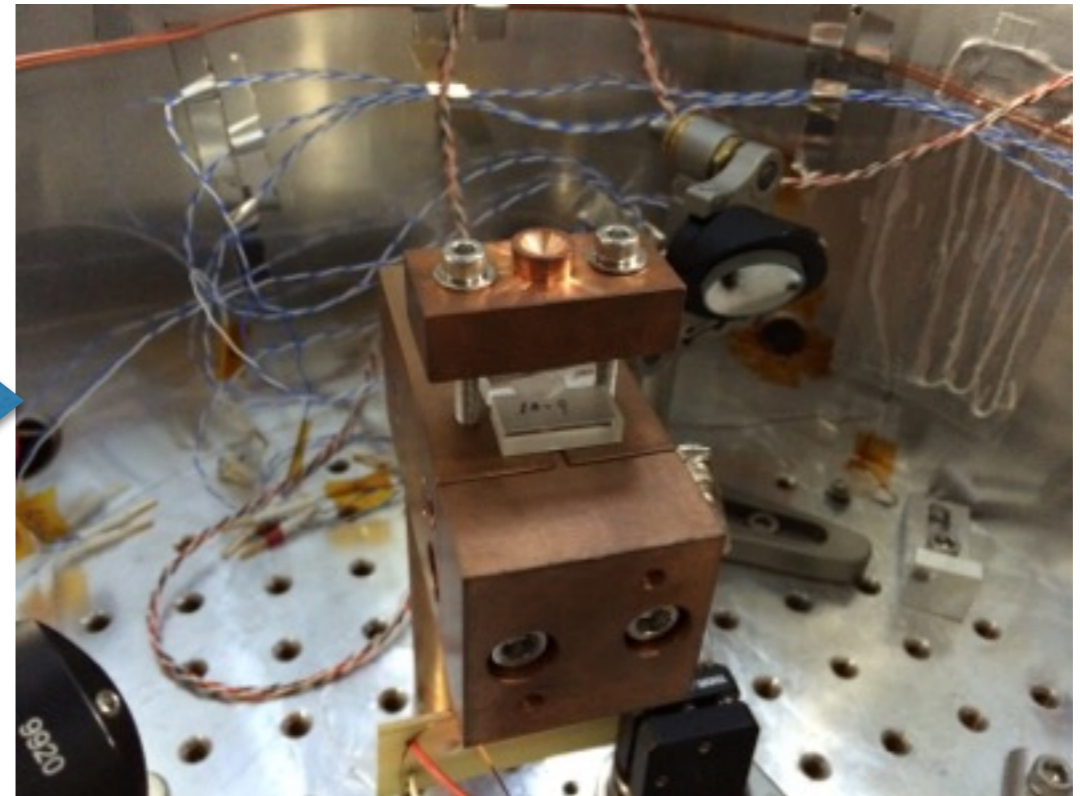
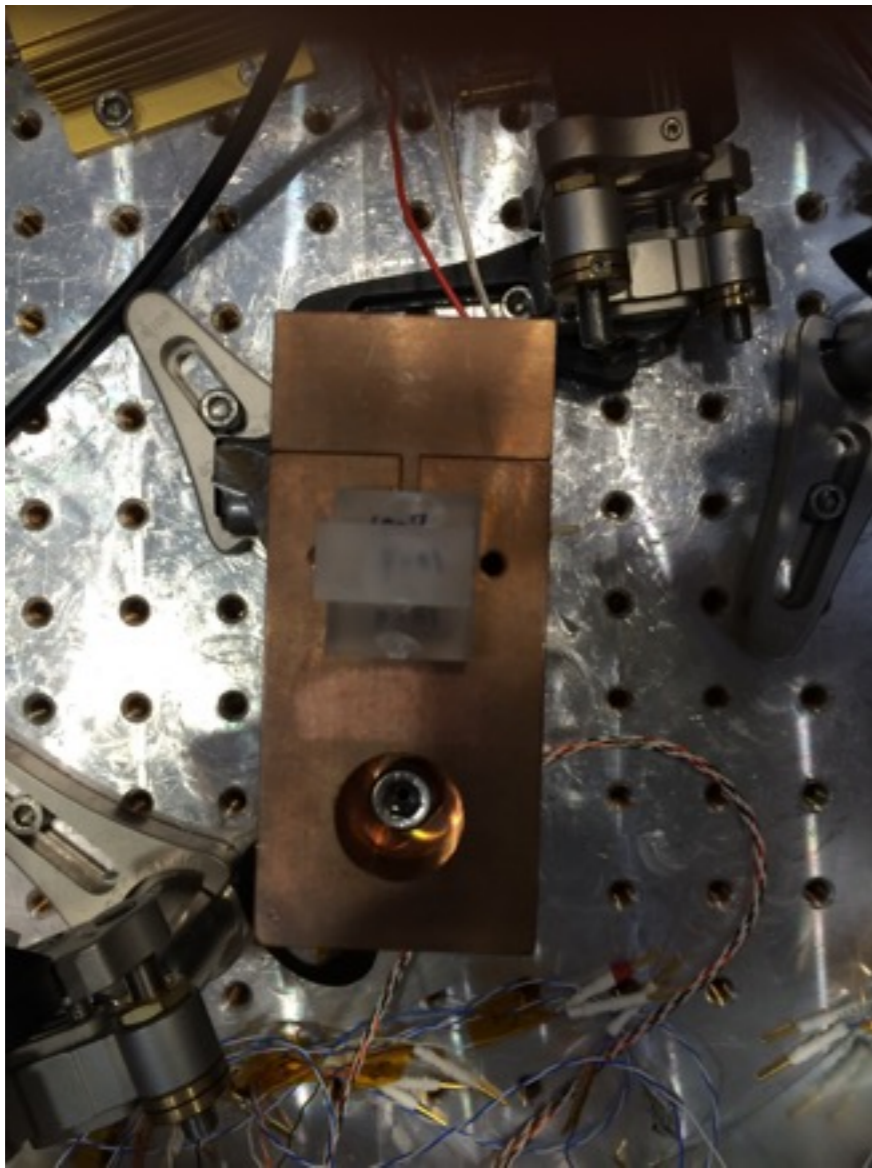
Hiroki Tanaka

# Q measurement

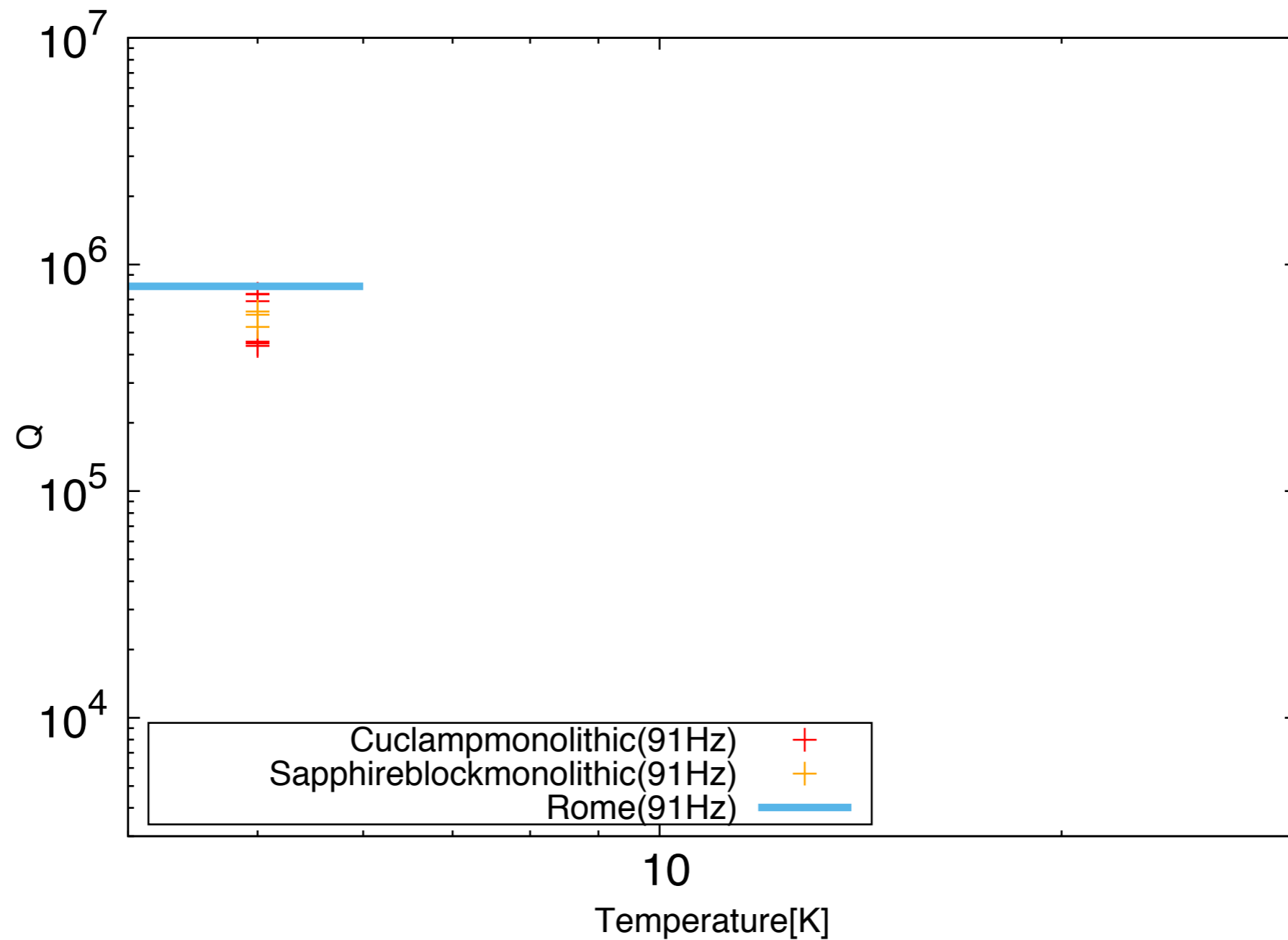
To improve clamp part in this measurement system, we clamped the fiber nail head by small sapphire blocks.



# Pictures



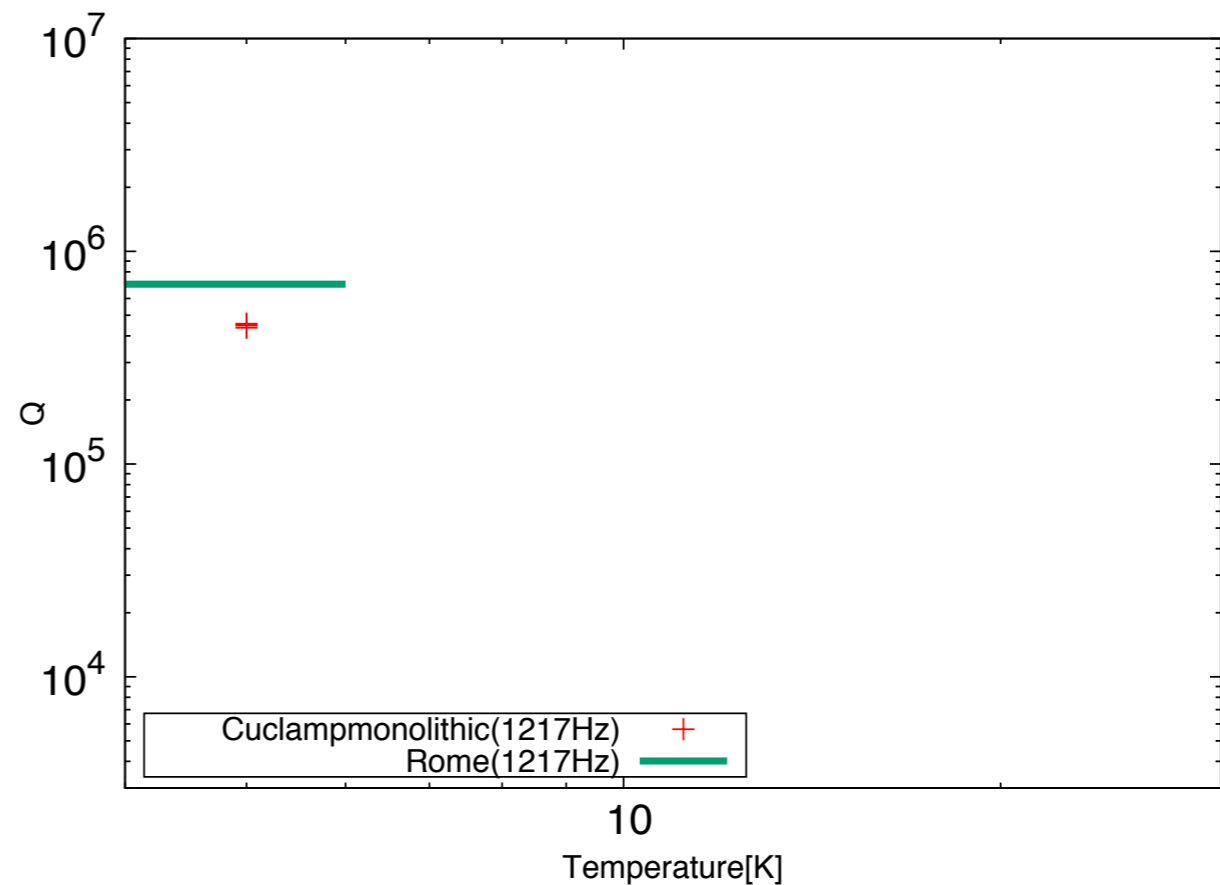
# Q-value(1st mode)



# Q-value(2nd mode)

We found no peak of 2nd mode and 3rd mode on the sapphire block case.

Perhaps it is because the laser hits near the bottom head of the fiber.



# Next plan

- The sapphire blocks have some cracks.
- We set up a non-broken fiber and non-broken sapphire blocks and we are measuring Q-value again.

# Extension

- We are drawing the extension in CAD.

# Problem

There are 16 screw holes on the cryostat inside.  
The positions of the 16 screw holes are not equal.

$a=2.4\text{mm}\sim 3\text{mm}$ ,  $b\sim 4\text{mm}$

