

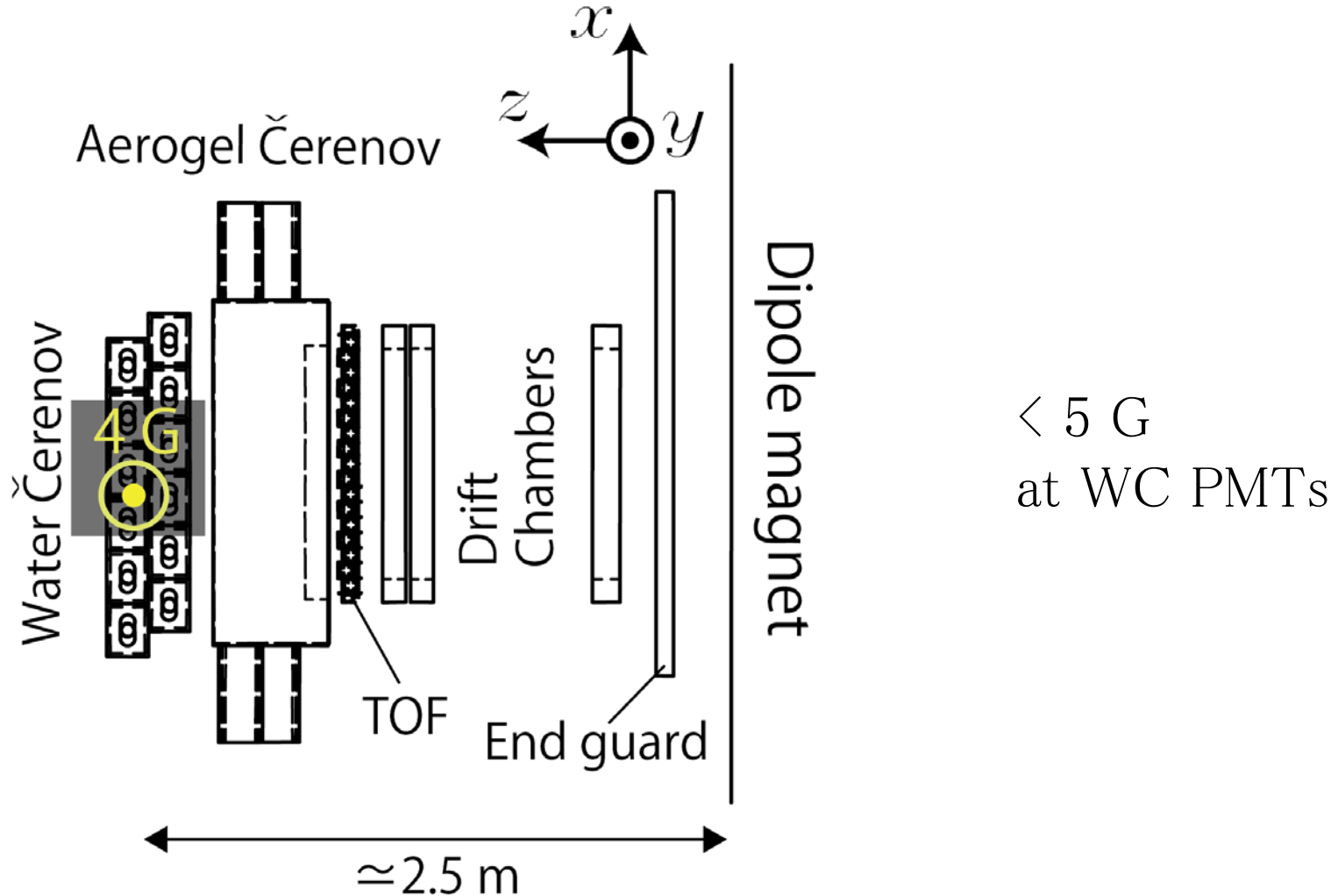
S-2S meeting



28Mar2016

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Stray magnetic field from S-2S D



Helmholtz coil



製作中の写真

Helmholtz coil

50 turns \times 2

R = 400 mm

“ミスミのアルミフレーム”

+

“被膜ケーブル”

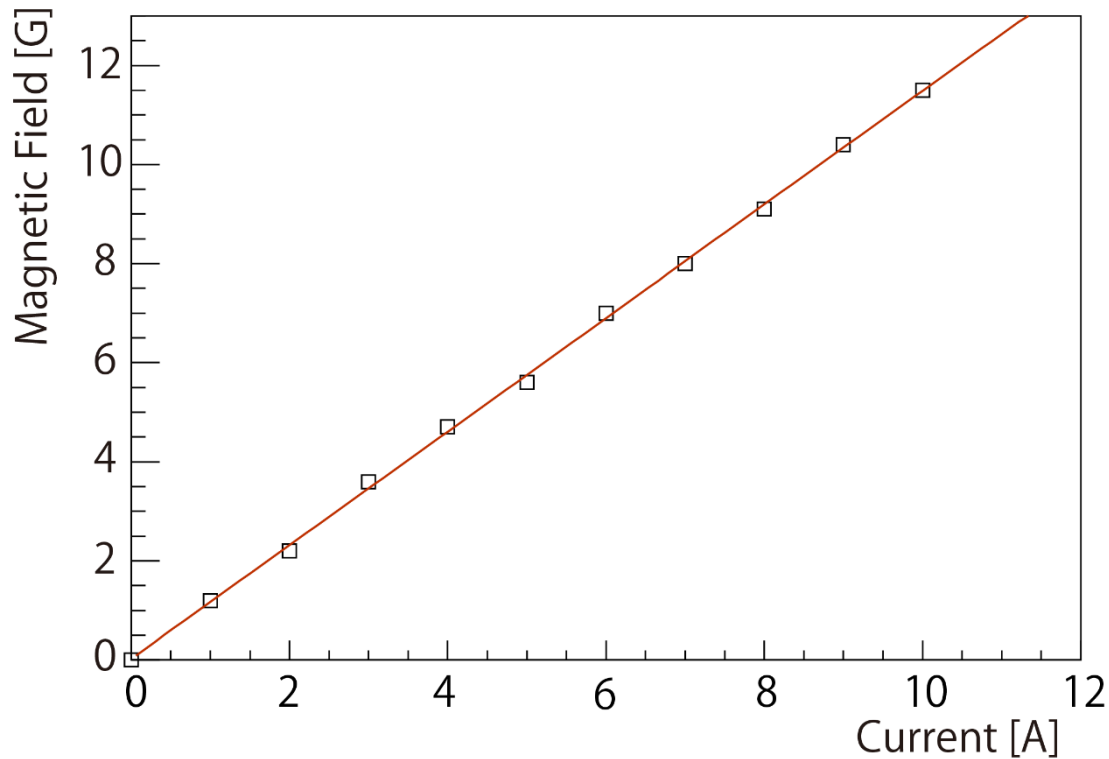
(外径 5.5 mm)

Helmholtz coil 励磁成功



Uniformity of magnetic field

Central volume
 $200 \times 200 \times 100 \text{ mm}^3$



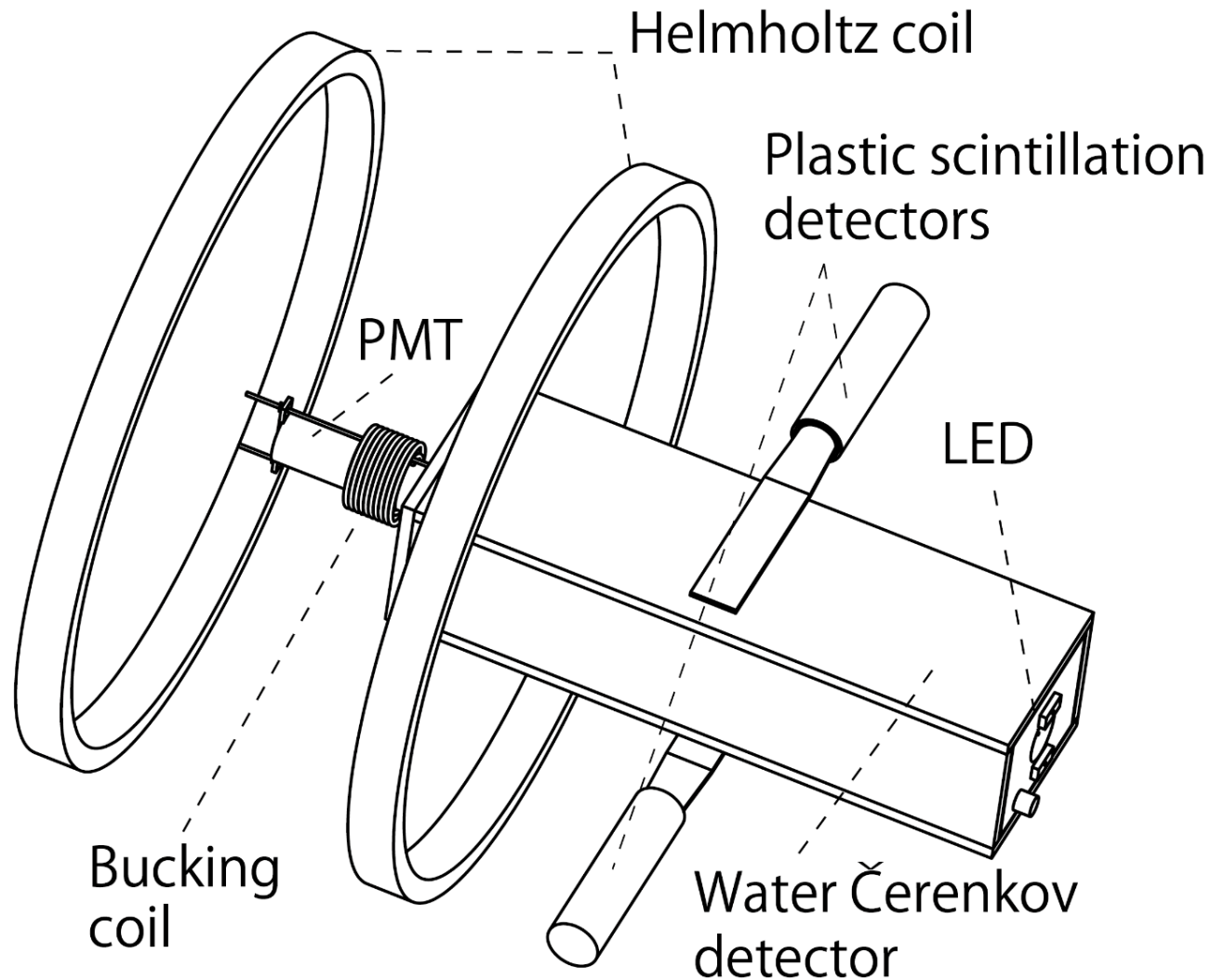
磁場の一様性:

$$\frac{\Delta B_y}{B_y} < 1\%$$

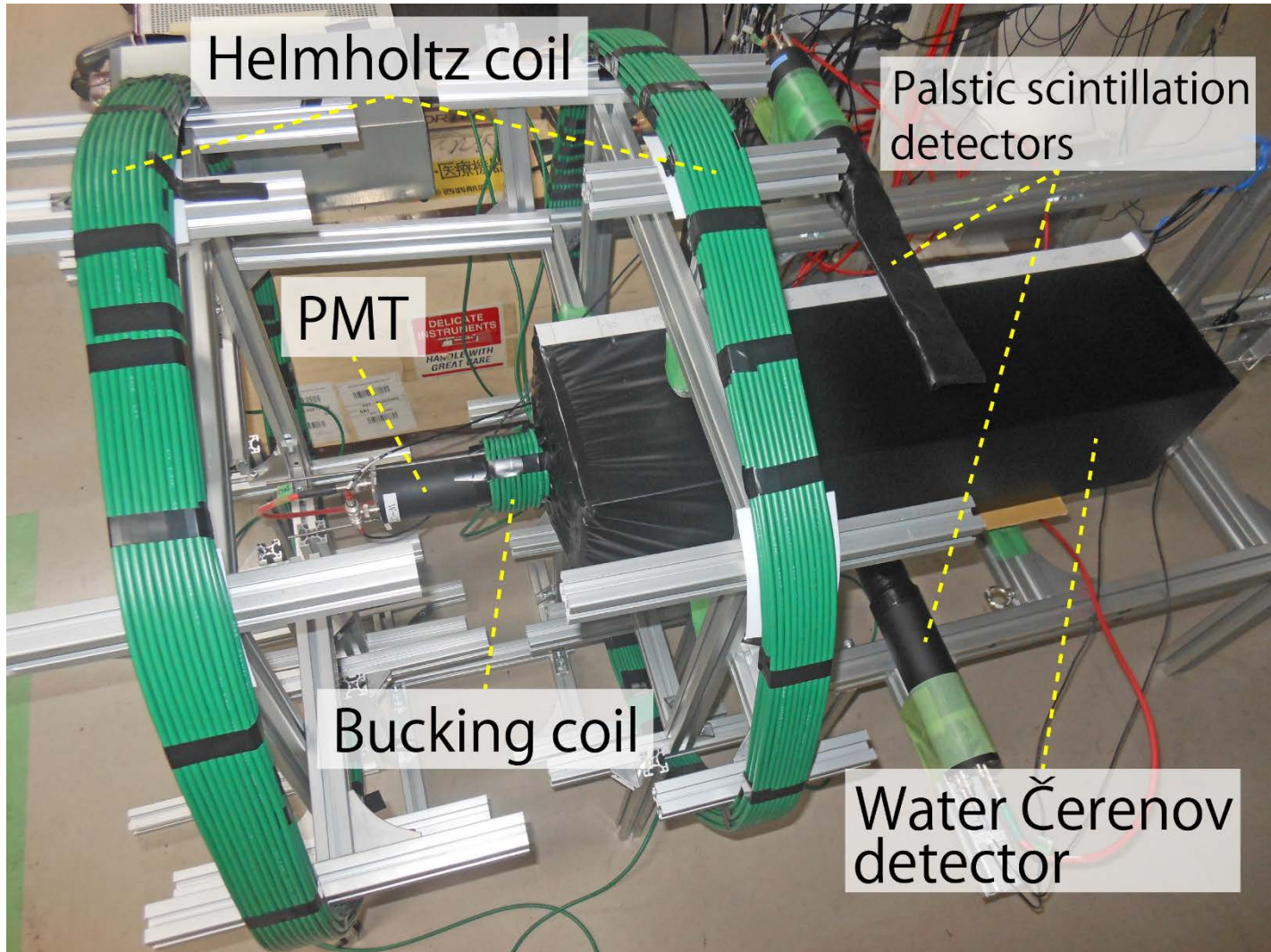
他の成分:

$$\frac{B_{x,z}}{B_y} < 3\%$$

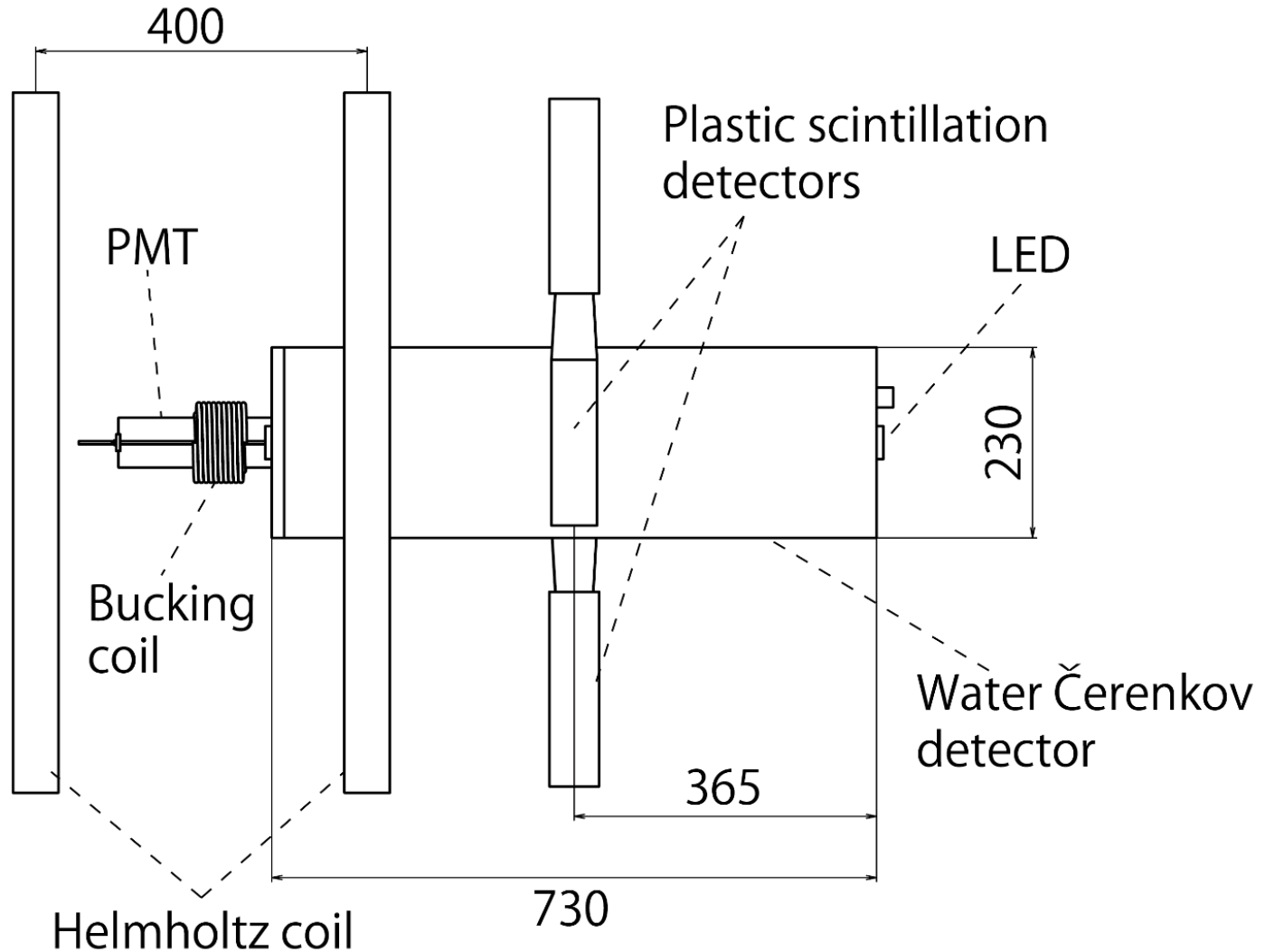
Experimental setup



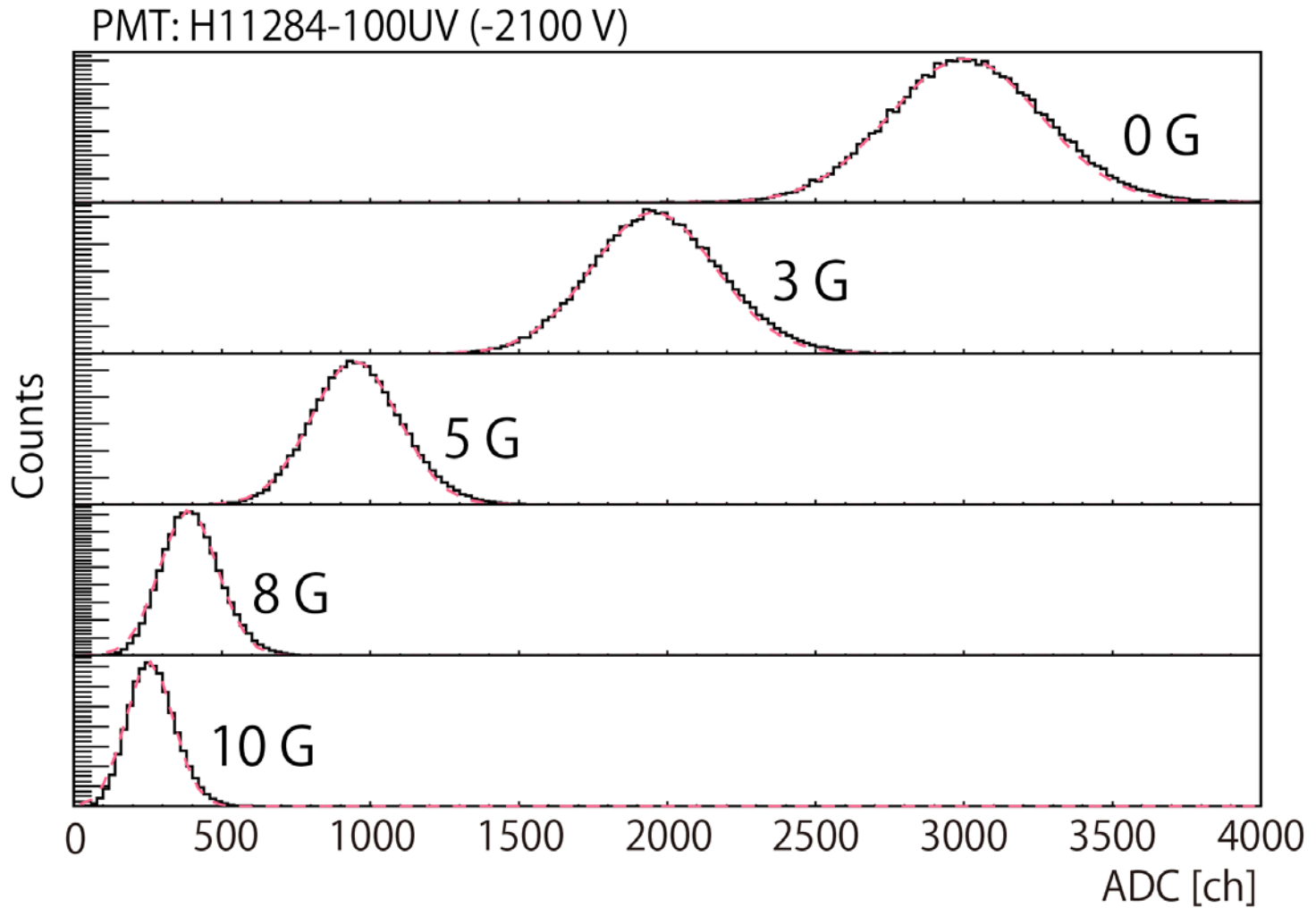
Experimental setup (photograph)



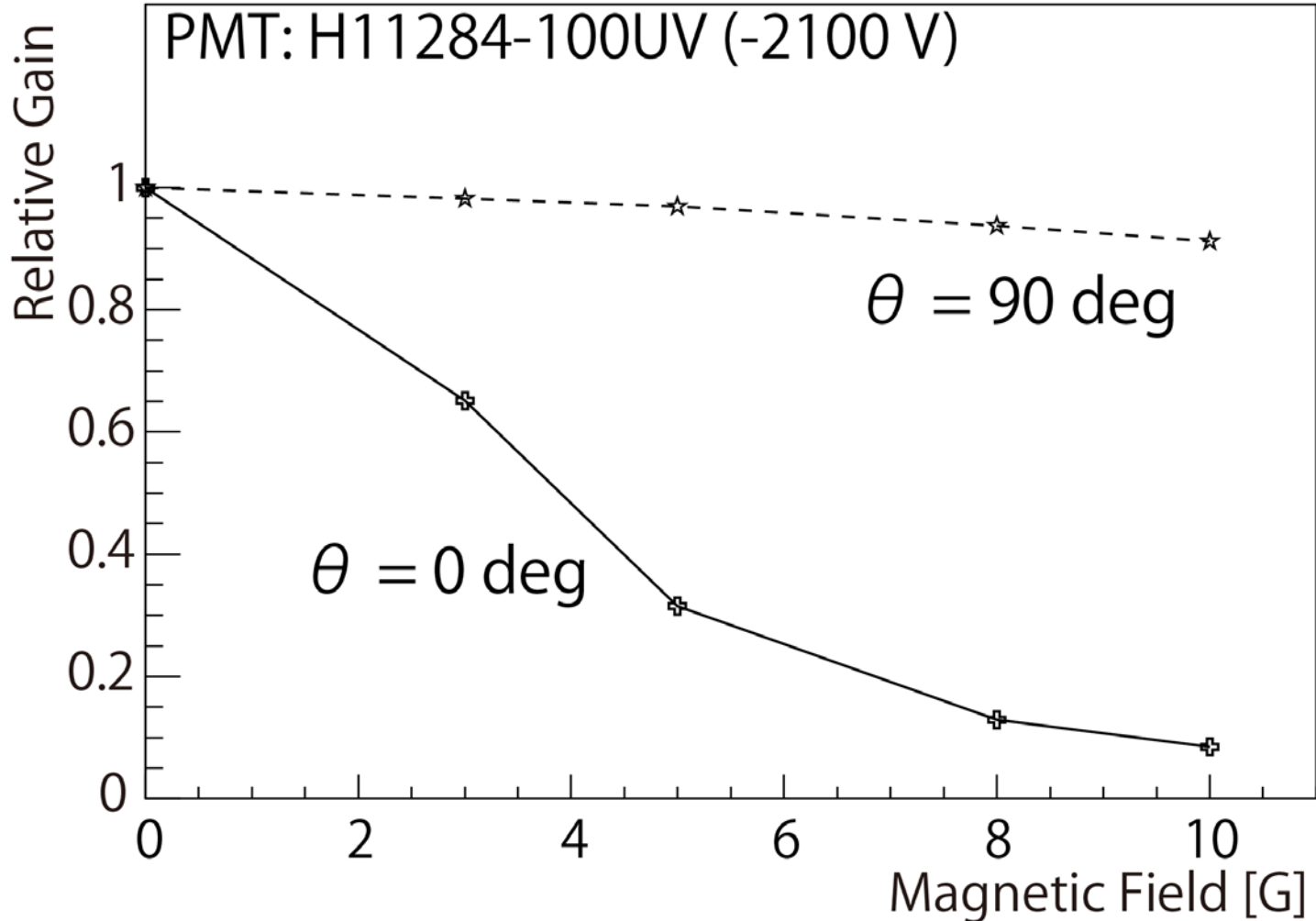
Experimental setup (top view)



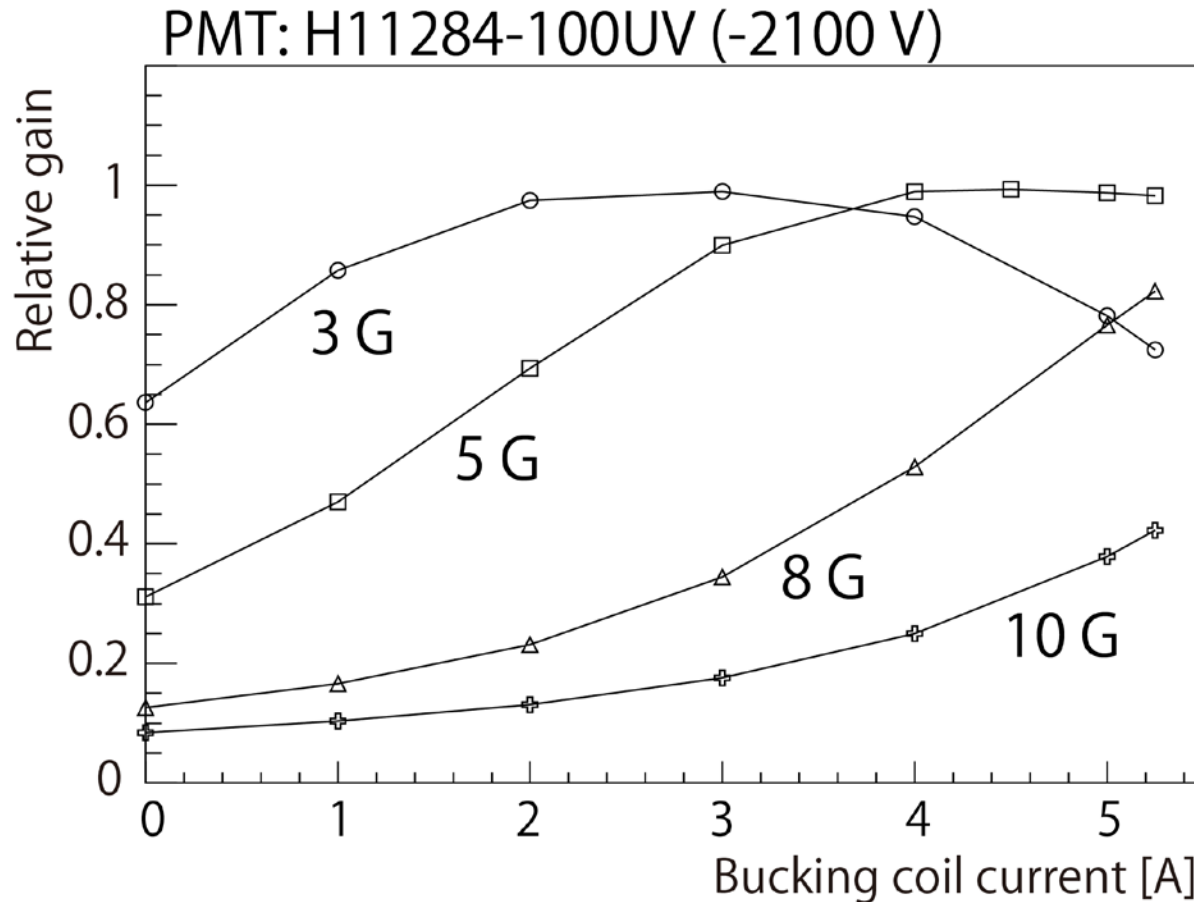
Magnetic field vs. ADC



Magnetic field vs. ADC

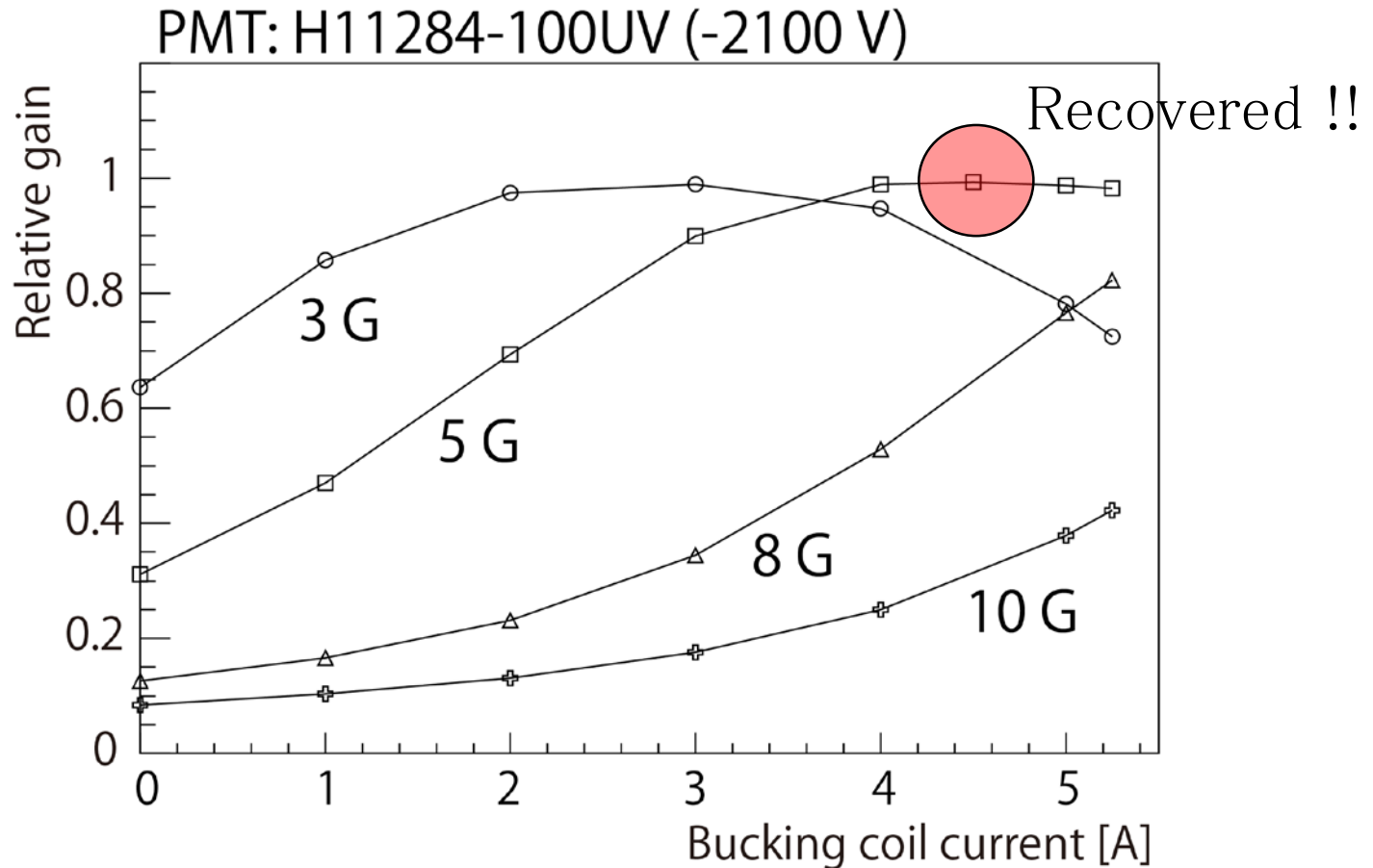


Gain recovery with a 20-turn bucking coil



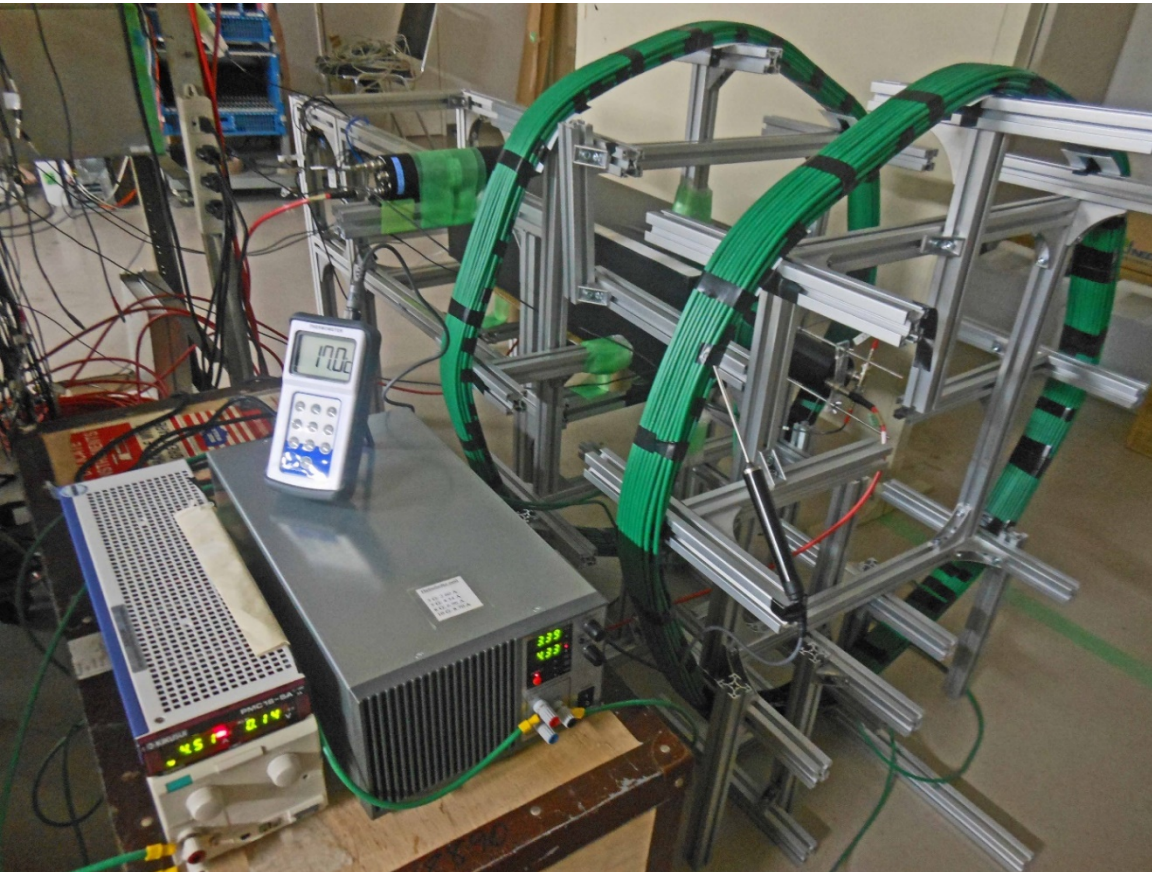
(The bucking coil was started winding at around 3 cm apart from the photocathode.)

Gain recovery with a 20-turn bucking coil



(The bucking coil was started winding at around 3 cm apart from the photocathode.)

Cosmic-ray test is in progress



5 G環境下でWCの
宇宙線テスト:
bucking coil ON/OFF

In Progress !