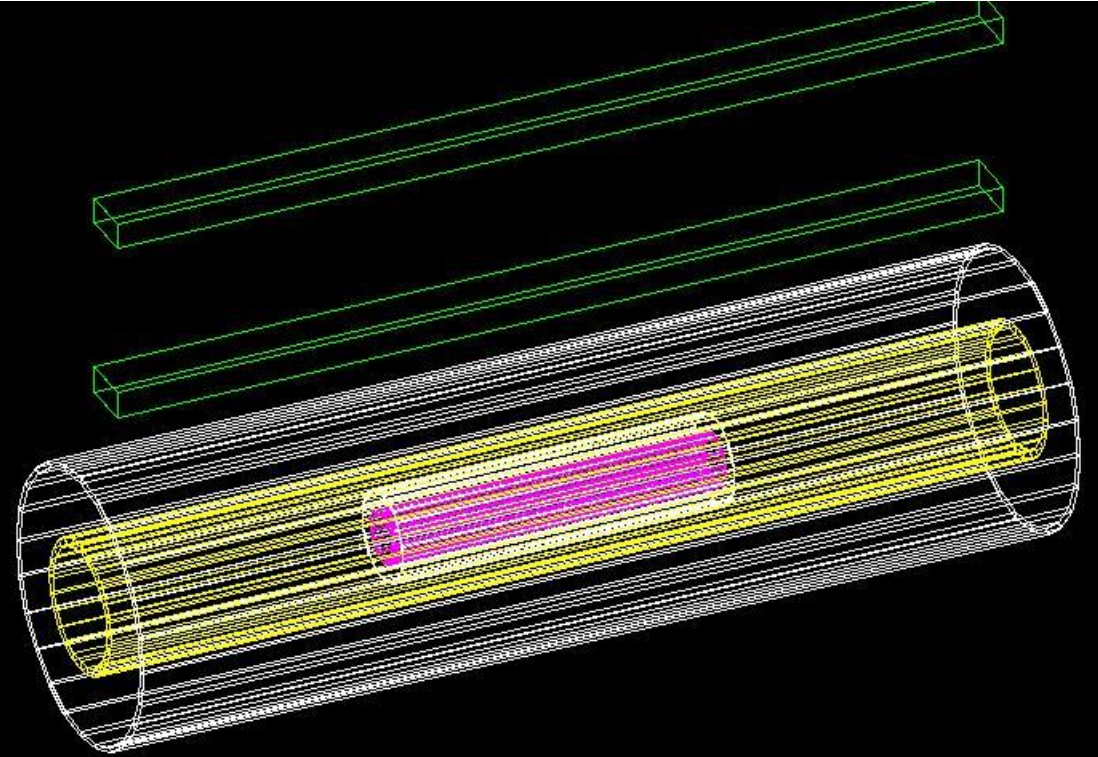
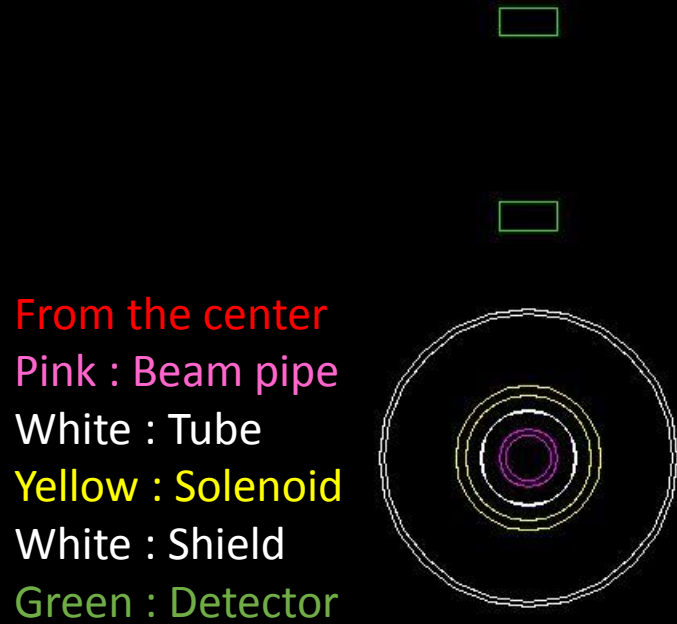


Positronium intensity measurement preparation (GBAR)

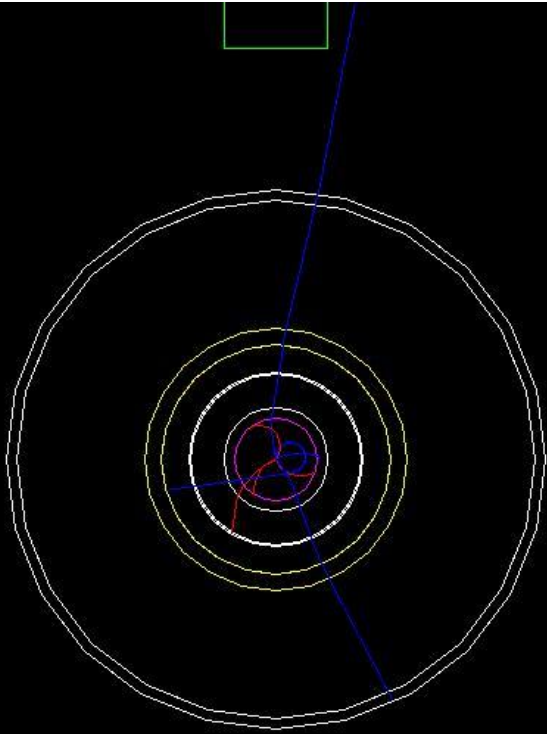
SNU

Bongho Kim

Anti-proton (beam pipe?)monitor simulation



Anti-proton (beam pipe?)monitor simulation

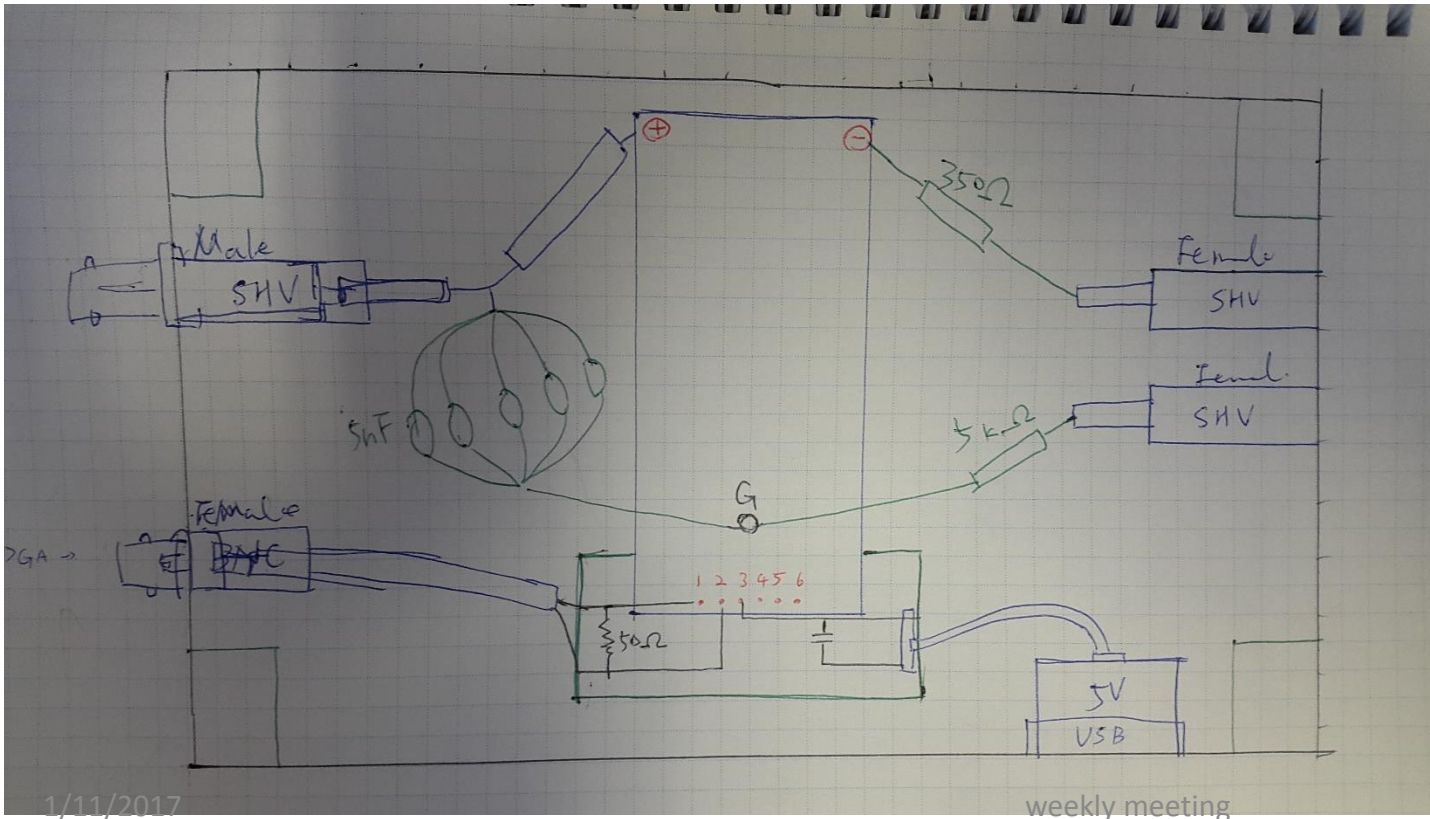


Parameters

Part	Radius(cm)	Length(cm)	Thickness(cm)	
Beam pipe	4	127.6	1	Cu (BeCu)
Beam tube	8.225	127.6	0.2	SUS
Solenoid	11	180	1.6	Ti-Nb
Shield	25	180	1	Fe
B-field	5	110		5T
Pressure				1e-12Torr
Anti-P	3	100		Uniform

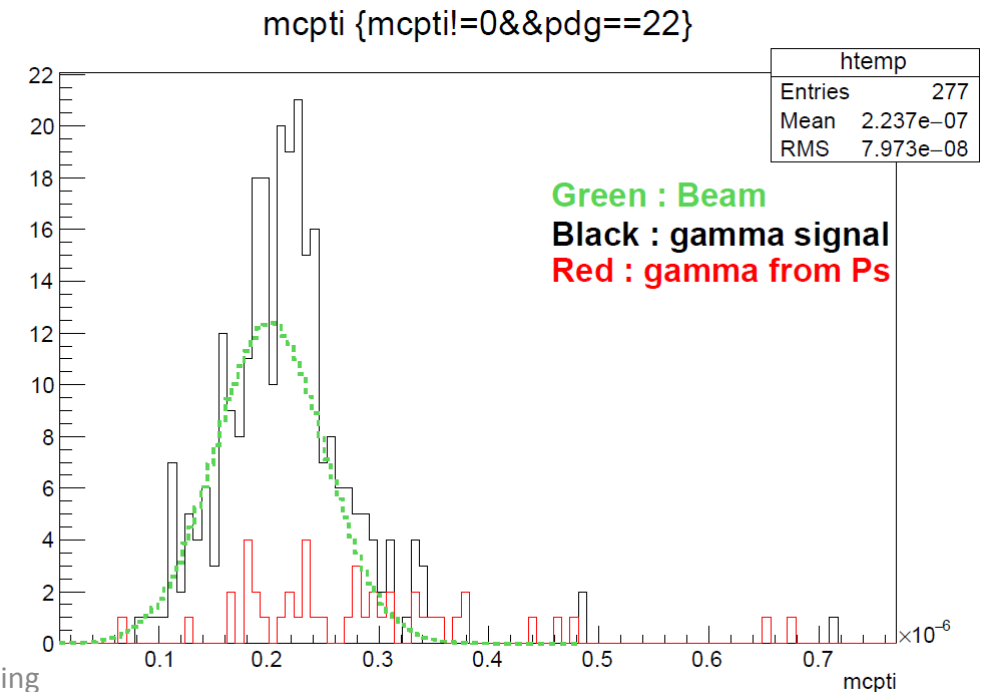
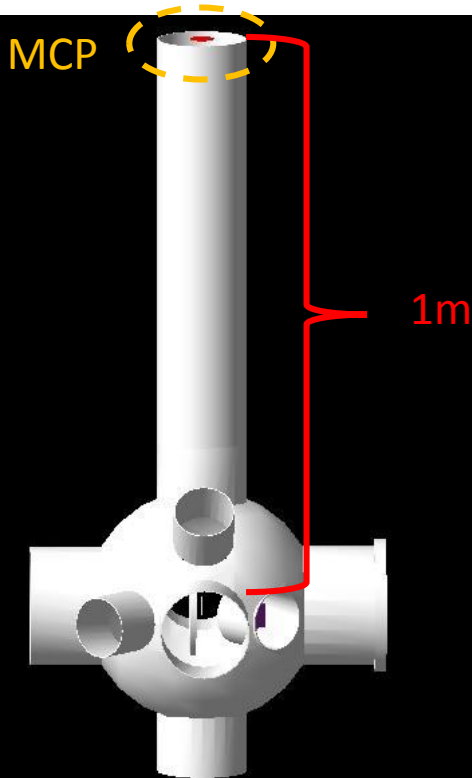
Antion project preparation help

- Buncher switch design is done
 - Fast High voltage switch (1ns rising time)



Simulation for gamma background check

- For $1.e6$ positron beam, 277# gamma hit the MCP and 44# are come from Ortho-positronium annihilation.
- Delayed gamma from O-Ps can be background for H signal at MCP.
- For 10keV P beam, $v = 1.385e+6\text{m/s}$ (0.72us) → High statistics check required.



Status in CEA Saclay

- Patrice move to CERN → Yves has charge for GBAR in CEA Saclay
- Next week : e⁺ beam usable (cathode heating now)
- End of January : p beam usable
- 1st, March : decelerator move to CERN (Orsay Univ)
- New Oscilloscope usable for PWO detector (HDO6054, 500MHz, 2.5GS/s)
- SPSC meeting at CERN (17th, Jan)

Next step

- 17th, Jan : Visit CERN for SPSC meeting

To do list

- W block holder design
- Mail to all for sharing information group (with GitLab information)
- PWO detector with positron beam
- Simulation for anti-P monitor
- Simulation for antion project