

(Color)

Black : Vacuum stuff.

Orange are : Clear area for laser beams from the ITM at the cryostat.

Blue lines : radiation shield duct abd baffles designed by Sakakibara.

Red and violet line : main beam center and width.

Green line : expected POX beam.

(1)

0.15deg (same in bLCGT) injection for sio2 ITM ($n = 1.451$, wedge = 0.333 deg).

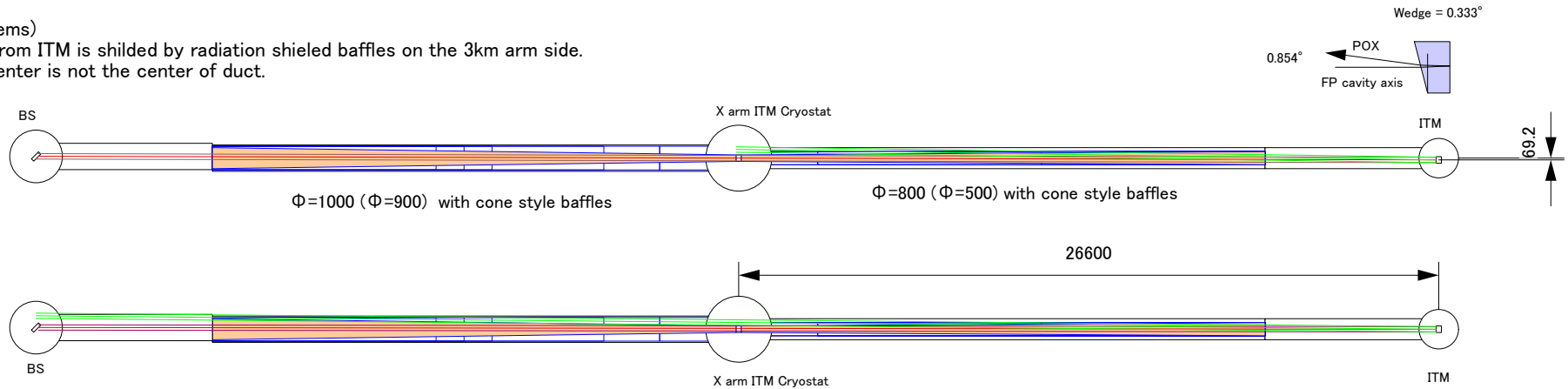
So, separation with the main beam at the cryostat is 325mm.

But, ITM position is shifted by about 70mm from the tank center. (note GV center window position is fixed at the center of duct.)

(problems)

POX from ITM is shielded by radiation shielded baffles on the 3km arm side.

ITM center is not the center of duct.



(2)

0.0744deg injection for sio2 ITM ($n = 1.451$, wedge = 0.165 deg). This angle is decided by the relative position between BS and ITM. for iLCGT.

ITM position is at center of the tank.

But, POX direction angle = 0.553 deg. So, separation with the main beam at the cryostat is 222mm.

(problems)

POX from ITM is shielded by radiation shielded baffles on the 3km arm side.

222m separation is small.

