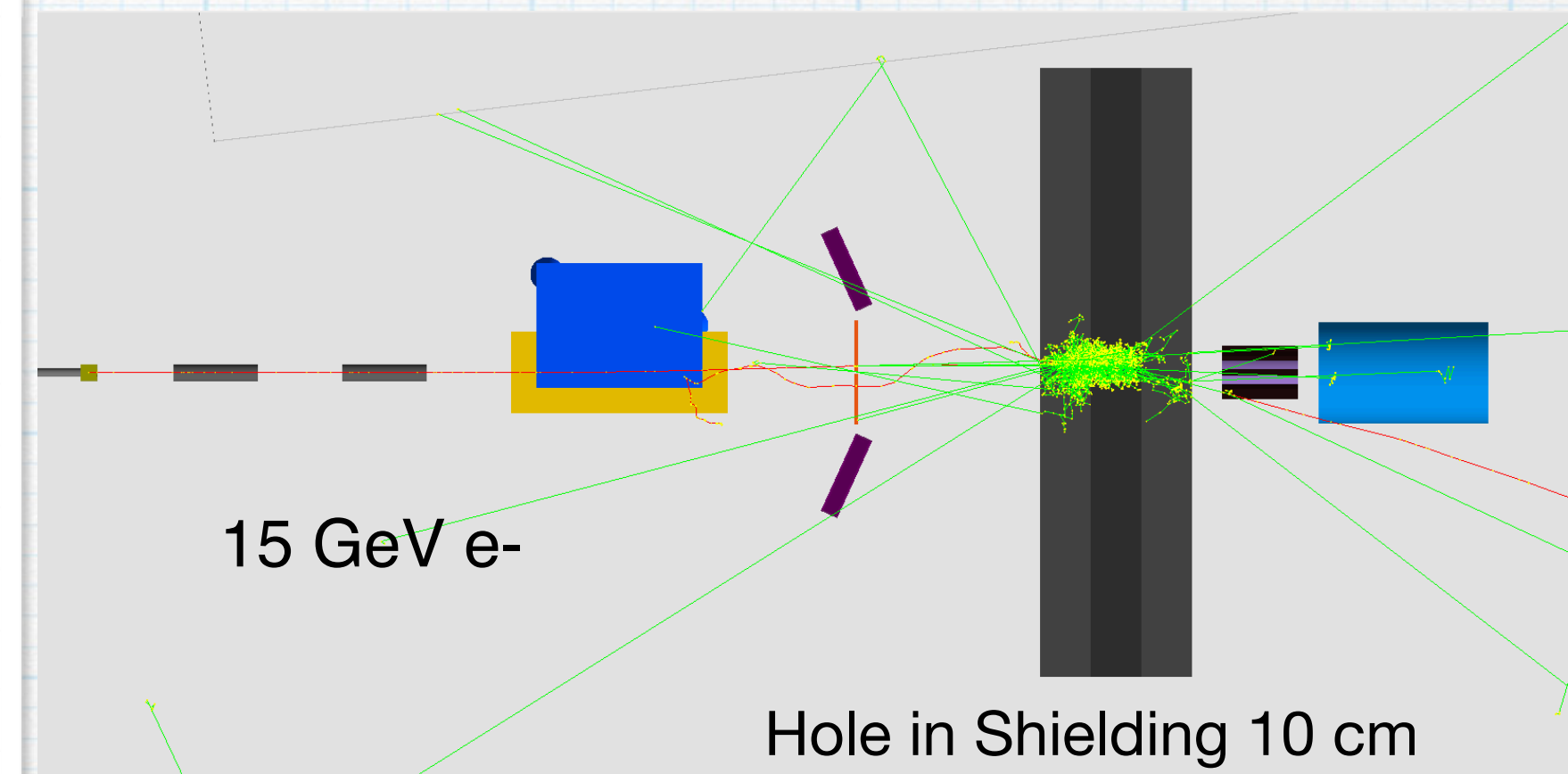
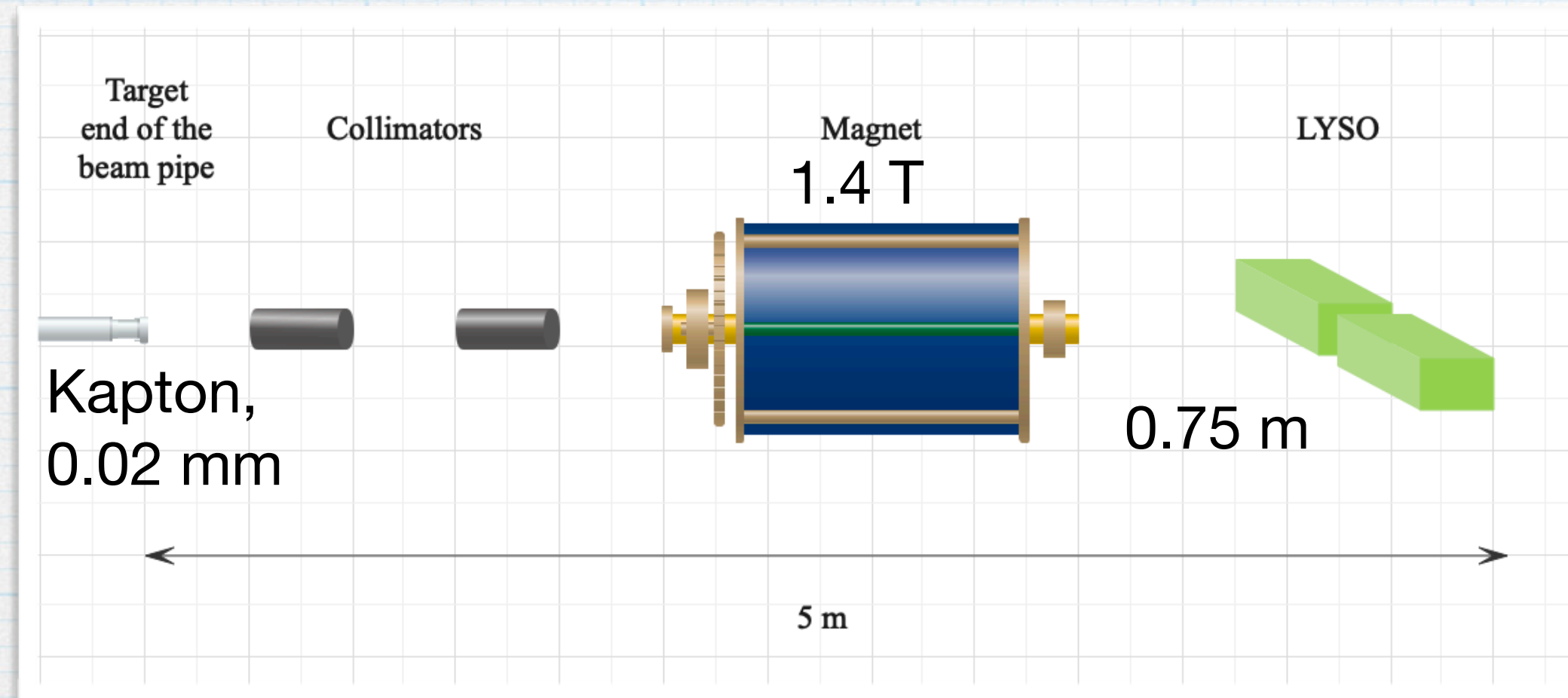


# FDS with LYSO calorimeters



**Aug 2020 Data Runs, bunch/pulse crossings completed**

Experiment Config	$w_0 = 3\mu\text{m}$	$w_0 = 3.5\mu\text{m}$	$w_0 = 4.0\mu\text{m}$	$w_0 = 4.5\mu\text{m}$	$w_0 = 5.0\mu\text{m}$	$w_0 = 20.0\mu\text{m}$	$w_0 = 50.0\mu\text{m}$	$w_0 = 100.0\mu\text{m}$
peak SQED $\xi$	5.12	4.44	3.88	3.45	3.1	0.78	0.32	0.15
JETI40 e-laser 16.5 GeV	939	951	946	949	938	193	200	200
JETI40 e-laser 17.5 GeV	182	121	115	125	69			

- \* The scintillators are modelled as a 15x5x2 cm (x:y:z ) layer of lyso material
- \* The crystal (bin) size of the scintillators are 2 x 1 mm (finer segmentation in x; the deflection direction) giving 25 x 300 bins.

**LYSO** ( $\text{Lu}_{1.8}\text{Y}_{0.2}\text{SiO}_5$ )

**All studies were performed with 100 BX at the laser intensity  $\xi = 0.3$  for 16.5 GeV electron beam**



# True electron/photon spectra

1000 BX at the laser intensity  $\xi = 0.3$  for 16.5 GeV electron beam

