ECal Acceptance

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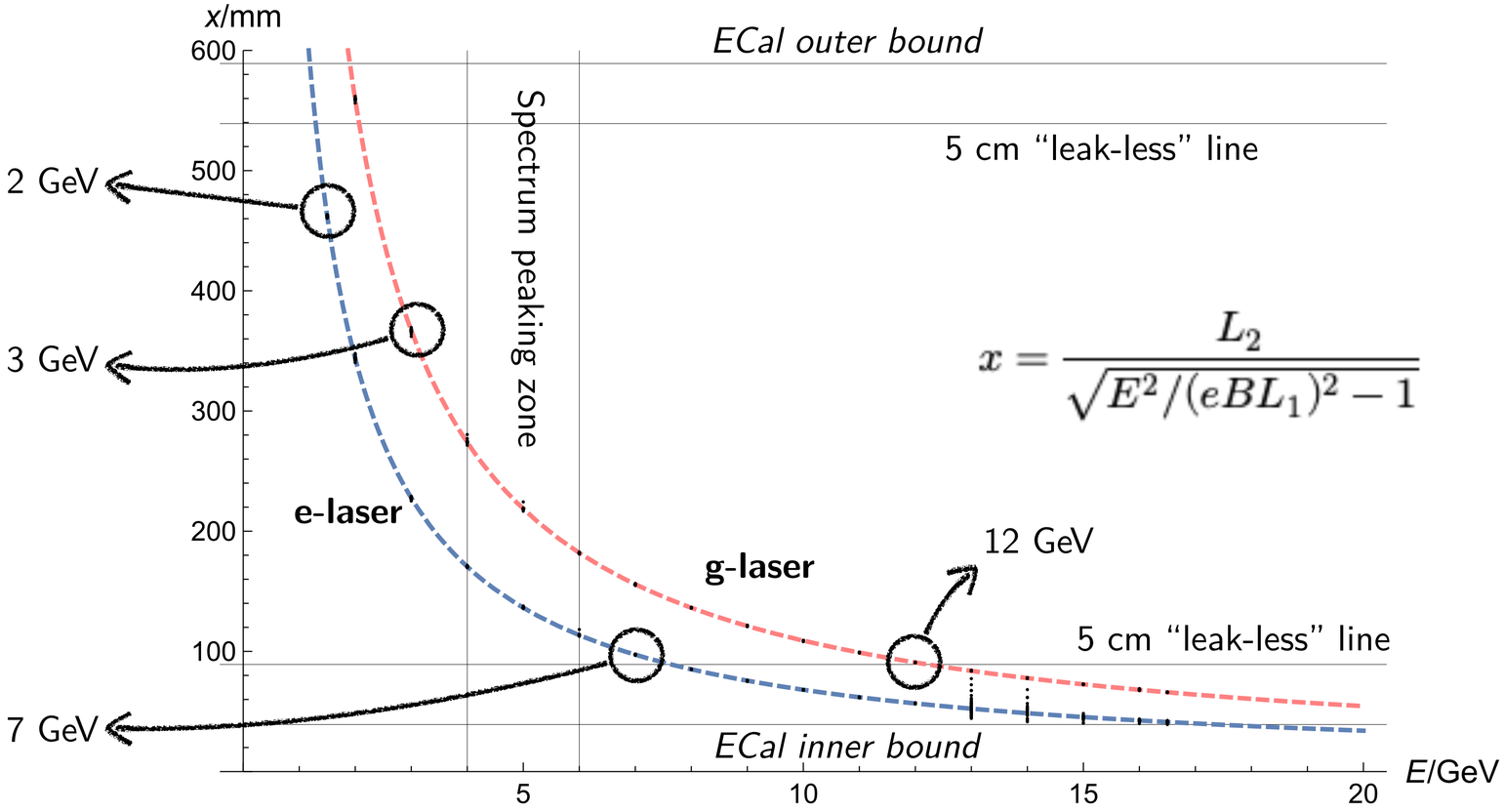
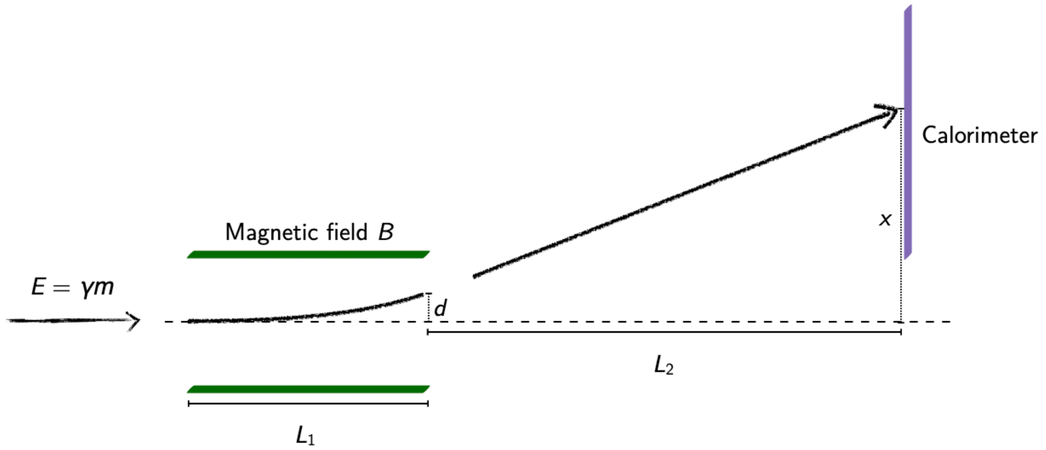
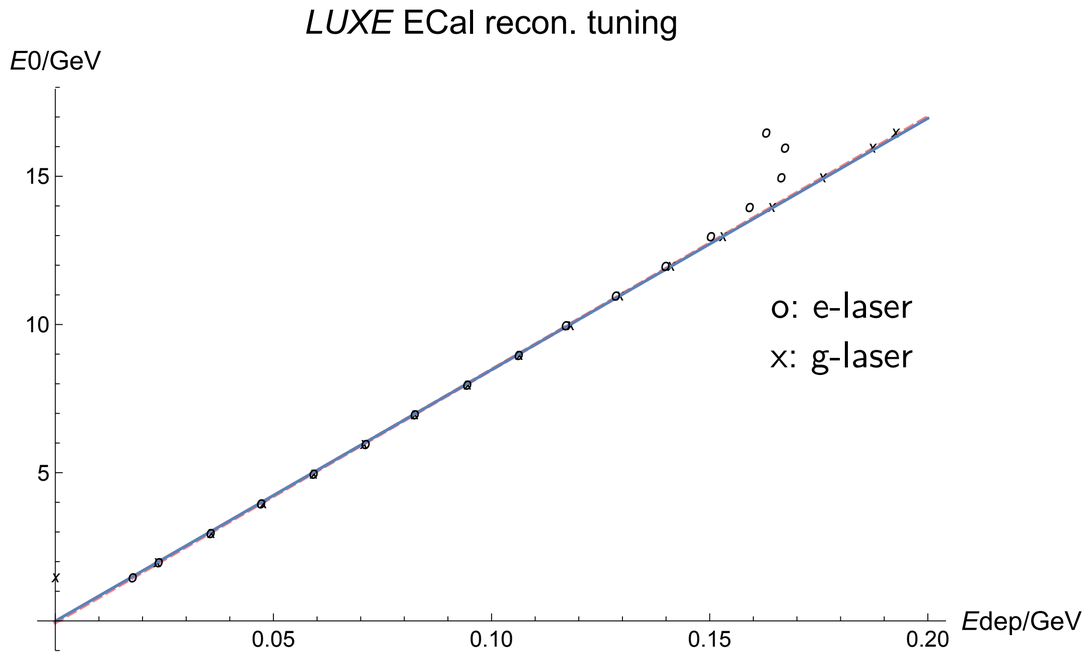


$$x = \frac{L_2}{\sqrt{E^2/(eBL_1)^2 - 1}}$$

- Select only "leak-less" samples 5 cm away from the ECal's edges
- Fit the x-E_0/E_0-E_{dep} relations with the selected
  - 6 samples for e-laser
  - 10 samples for g-laser
- Use the relations to estimate leaking near the edges

	$\mathbf{L_2}$	$\mathbf{eBL_1}$
e-laser	2363.7±3.9 mm	287.71±0.47 MeV
g-laser	2369.5±4.7 mm	459.3±0.9 MeV

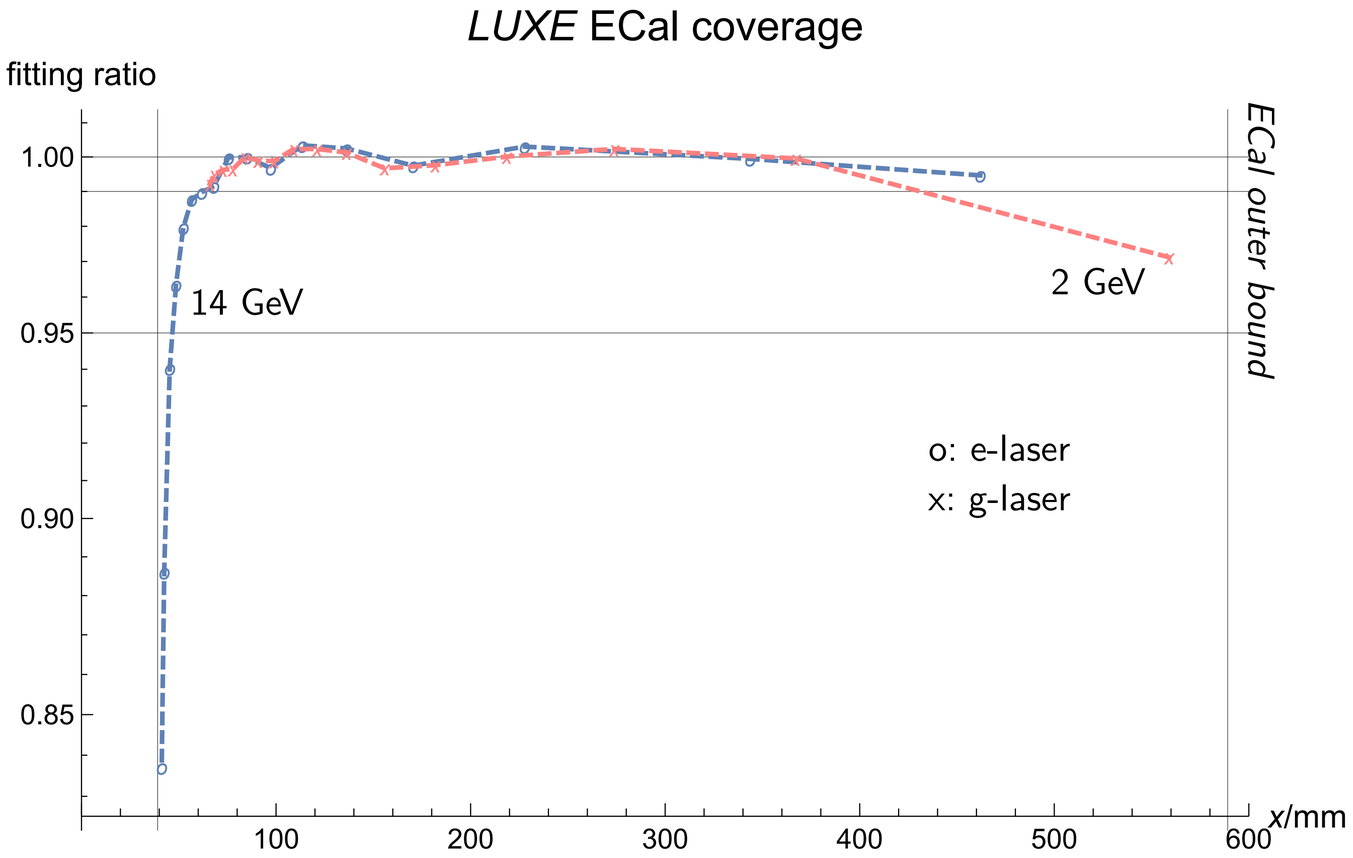




$$E_0 = -f + p_0\, E_{\mathrm{dep}}$$

	-f	p0
e-laser	(-8±38) MeV	84.82±0.71
g-laser	(-53±34) MeV	85.23±0.36

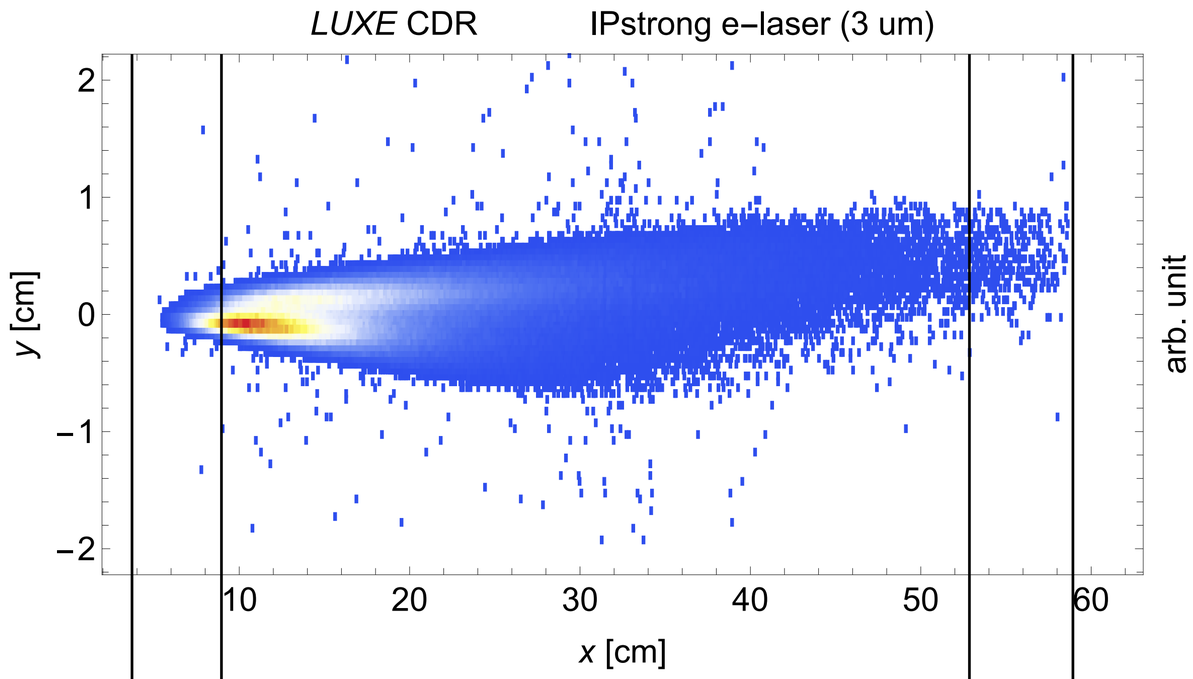
True Energy	1.5	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16.5
Recon. Energy (e-laser)	1.492	*1.999*	*3.009*	*3.990*	*5.012*	*6.020*	*6.997*	7.999	8.999	9.915	**10.89**	**11.85**	**12.74**	**13.49**	**14.10**	**14.18**	**13.81**
	-0.54%	*-0.06%*	*0.30%*	*-0.25%*	*0.25%*	*0.34%*	*-0.32%*	-0.01%	-0.01%	-0.85%	**-1.0%**	**-1.2%**	**-2.0%**	**-3.7%**	**-6.0%**	**-11%**	**-16%**
Recon. Energy (g-laser)	**-0.049**	1.942	*2.999*	*4.009*	*5.000*	*5.986*	*6.977*	*8.010*	*9.021*	*10.02*	*10.99*	*11.99*	13.00	13.95	14.94	15.92	16.37
	-100%	-2.9%	*-0.04%*	*0.23%*	*0.01%*	*-0.24%*	*-0.33%*	*0.13%*	*0.23%*	*0.23%*	*-0.12%*	*-0.10%*	-0.01%	-0.36%	-0.37%	-0.52%	-0.78%

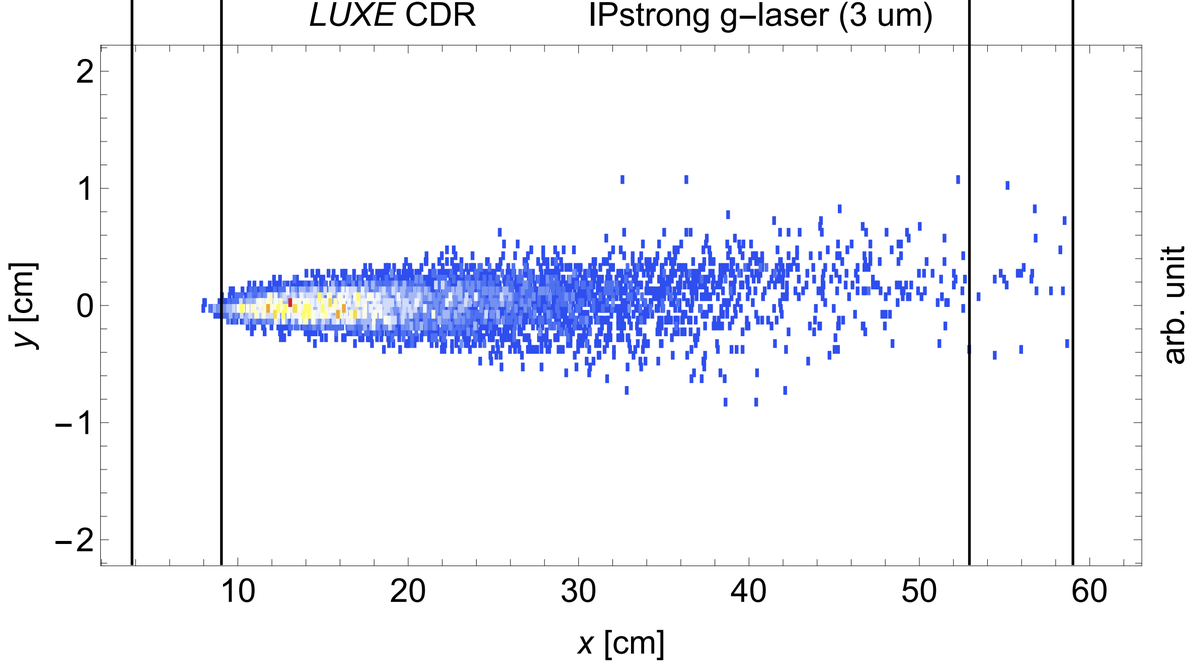


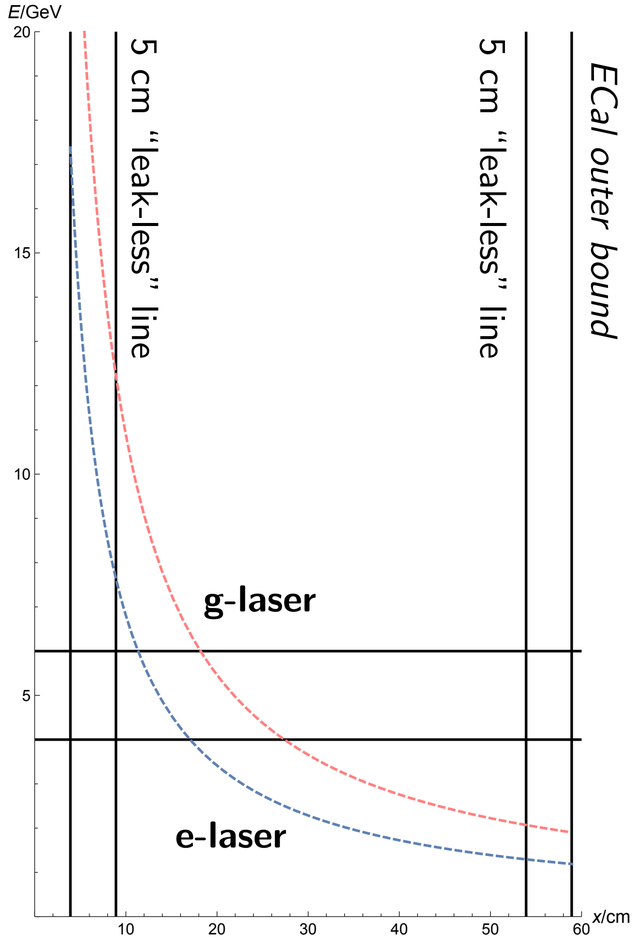
- Assume the E_{dep} be made by a single mono-energetic positrons, then
- Use the linear E_0-E_{dep} relation to fit a "original" energy E_{fit}.

$$\text{fitting ratio} = E_{\text{fit}}/E_0$$

- Need more data close to the outer boundary (angular effect?)







		100%	99%	95%	95%	99%	100%
e-laser's edges	Signal (GeV)	12.72	9.60	8.34	2.10	1.66	0.70
	x (mm)	53.50	70.85	81.62	327.61	415.34	1060.61
g-laser's edges	Signal (GeV)	13.63	11.85	10.58	2.57	1.95	1.43
	x (mm)	79.89	91.91	102.96	430.57	573.15	806.16