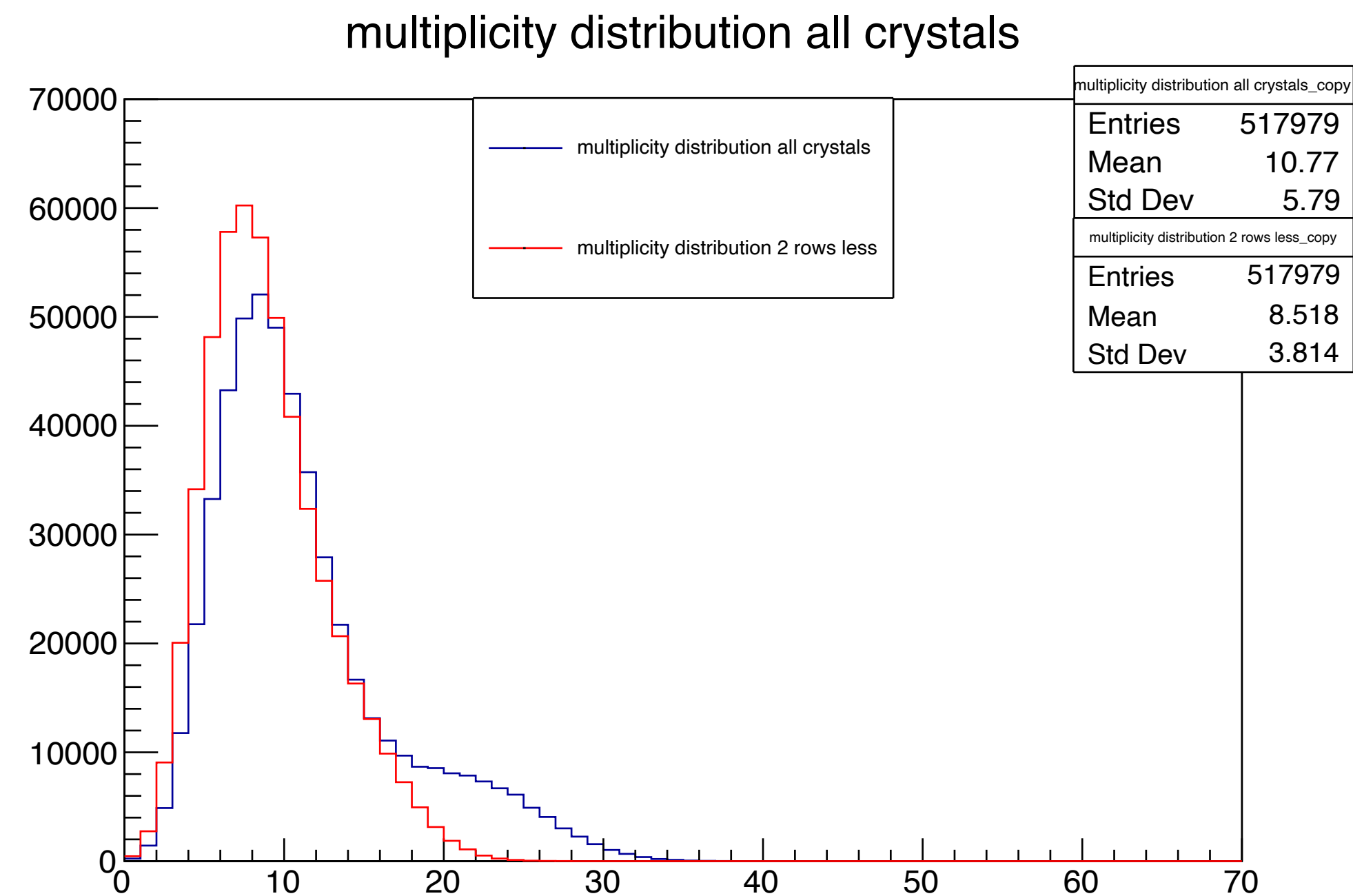
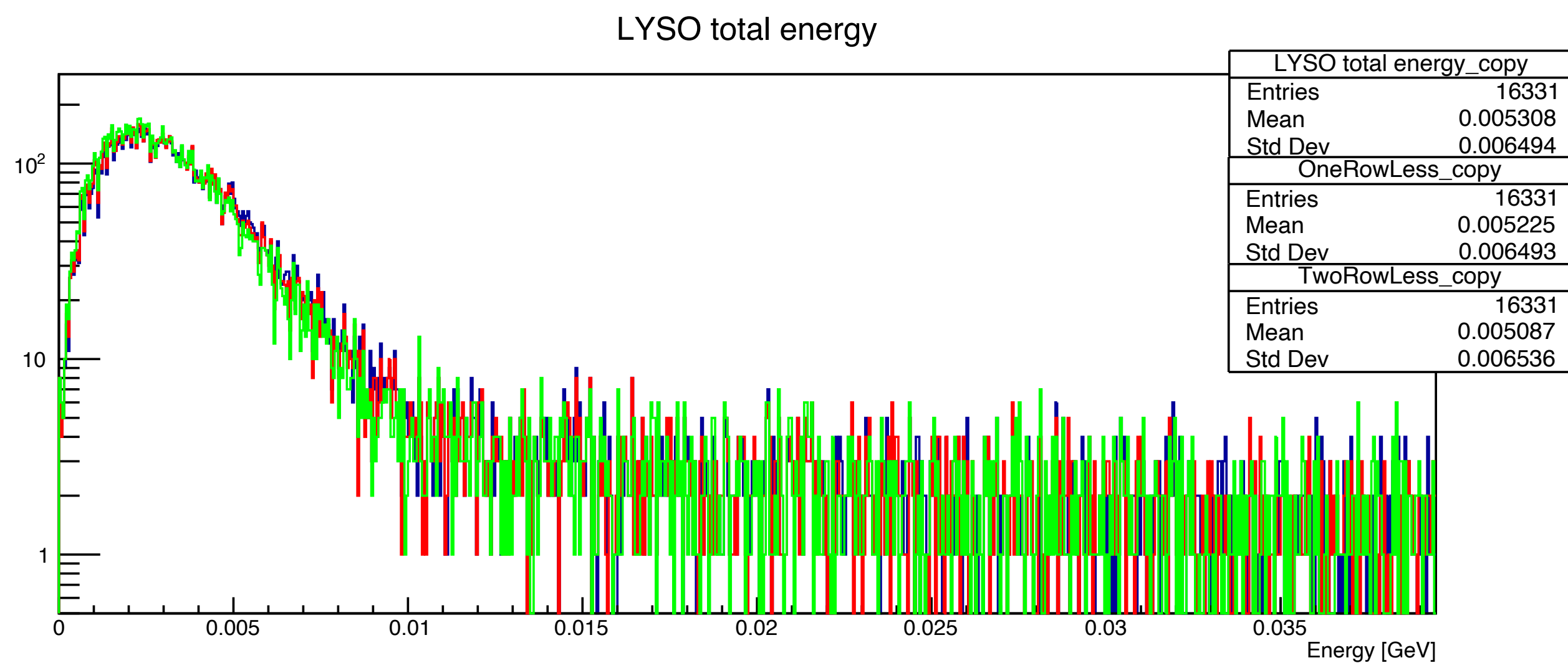


LYSO analysis

Anna Marini, 09/10/2023

Simulazioni SRD

Rimozione righe di cristalli



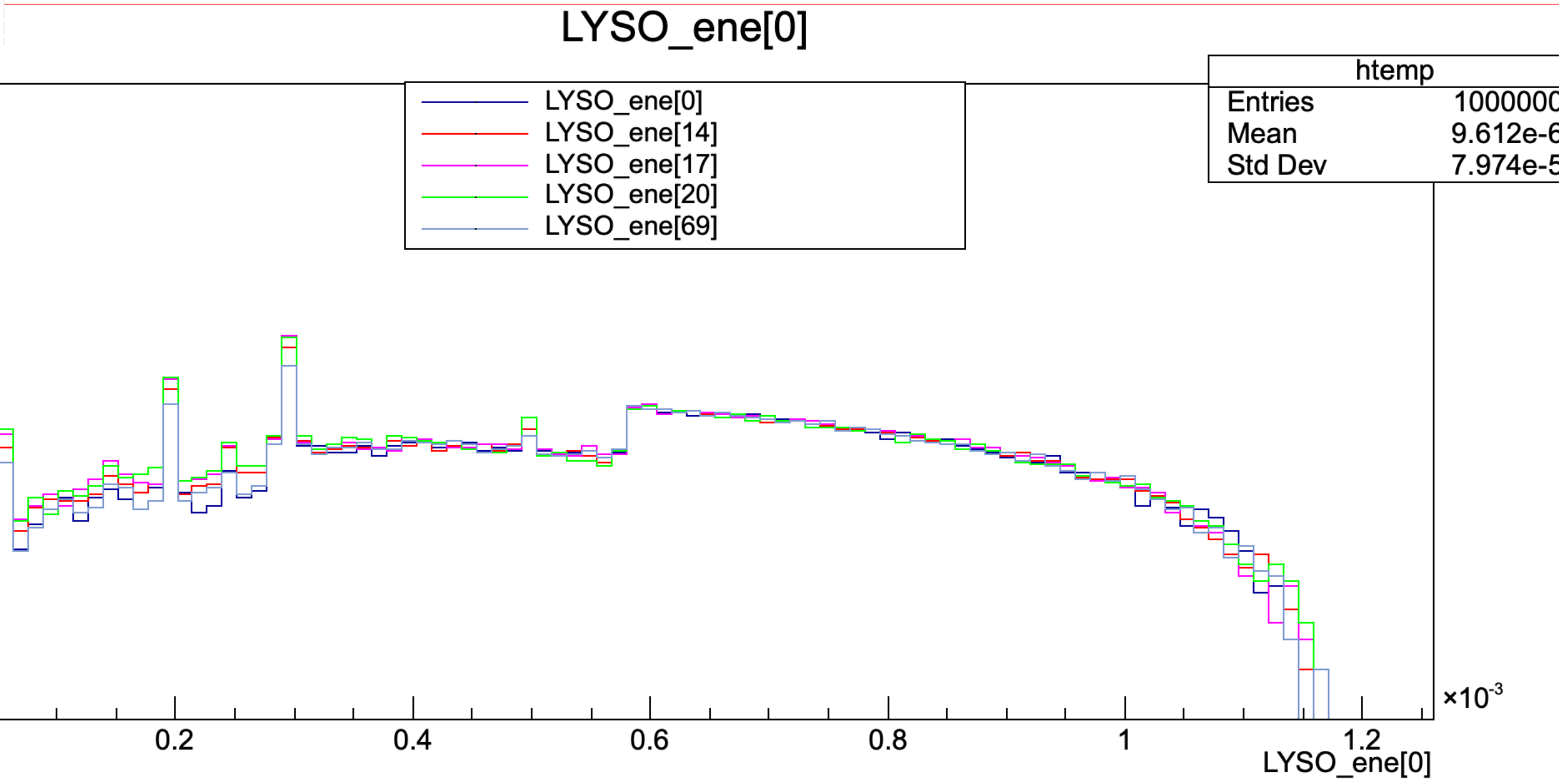
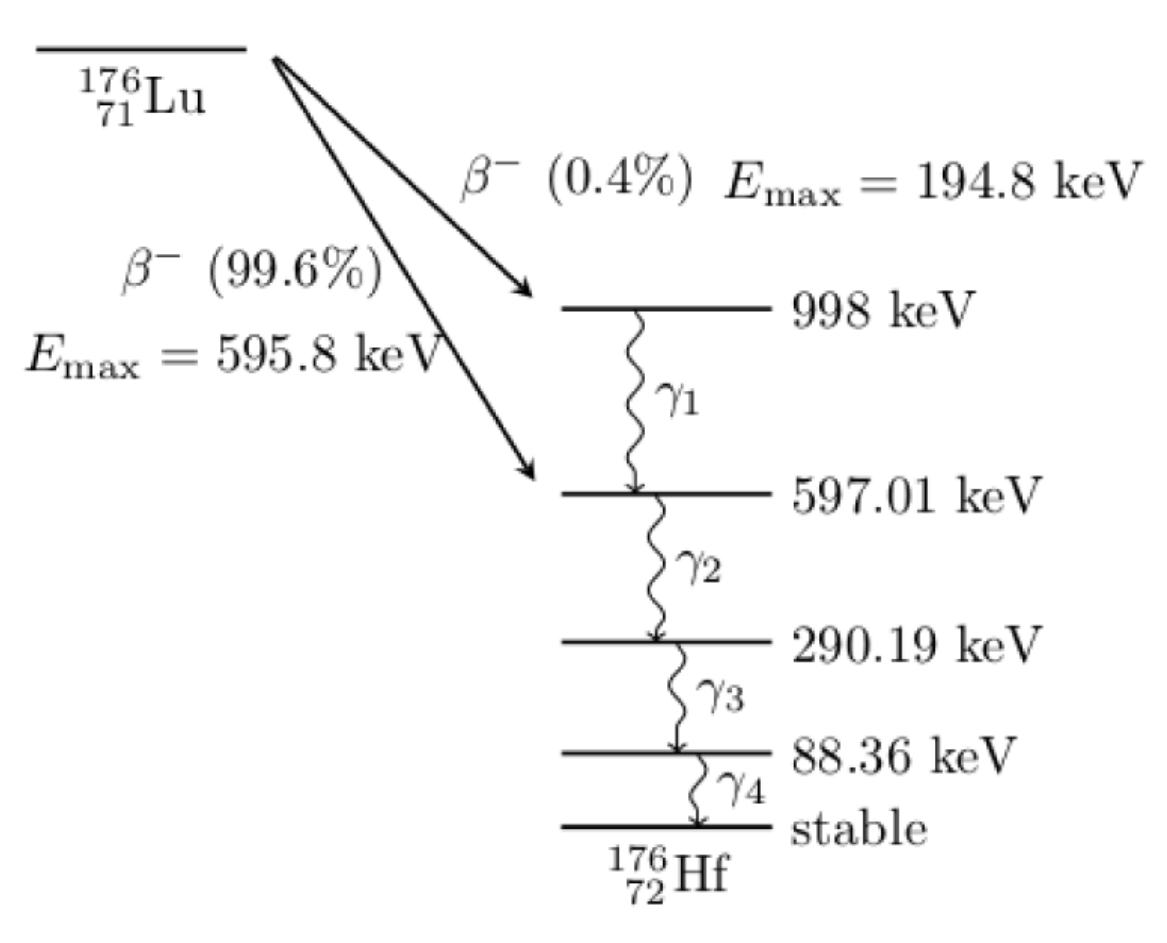
Simulazioni SRD

Efficienza

60 GeV	Condizione	Efficienza a 150 phe	Efficienza a 200 phe	Efficienza a 150 phe con 2 righe in meno di cristalli	Efficienza a 200 phe con 2 righe in meno di cristalli	
SiPM 25 μm	Solo Soglia	0.999	0.998	0.999	0.997	150 phe = 500 keV
SiPM 25 μm	Soglia + molteplicità (≥ 2)	0.997	0.989	0.994	0.981	200 phe = 700 keV
SiPM 25 μm	Soglia + molteplicità (≥ 3)	0.987	0.964	0.976	0.938	

Radioattività LYSO

Cristalli singoli



13	27	41	55	69
12	26	40	54	68
11	25	39	53	67
10	24	38	52	66
9	23	37	51	65
8	22	36	50	64
7	21	35	49	63
6	20	34	48	62
5	19	33	47	61
4	18	32	46	60
3	17	31	45	59
2	16	30	44	58
1	15	29	43	57
0	14	28	42	56

Radioattività LYSO

Cristalli singoli

Soglia in energia pari a 500 keV

