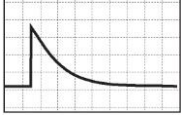

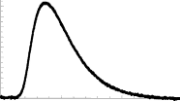






Detector Channels	Preamps + settings	max. ampl. 	Shaper-settings 	max. ampl. 	Caen v785 AH ADC	meas. peak @ ADC ch.
Si-strips p-sides 7x6 = 42 channels	 MPR-32 Gain setting: <b>1 GeV = 1 V</b>	2 GeV = 2 V overrange!	Hardware gain: x2 Software gain: x20 Shaping time: 1 us	80V overrange!	range: 8 V Resolution: 12 bit/4096 ch	< ch. 500 (this is likely not the actual signal)
Si-pads n-sides 6 channels	 MSI-8 Gain setting: <b>5 GeV = 1 V</b>	2 GeV = 0.4 V	Hardware gain: x2 Software gain: x8 Shaping time: 1 us	6.4V		ch. 1500-2000 (expected: ~3300)
DSSD p- & n-side 4 channels	 MSI-8 Gain setting: <b>5 GeV = 1 V</b>	1.2 GeV = 0.25 V	Hardware gain: x2 Software gain: x11 Shaping time: 1 us	5.5V (resistor chain!)		-
CsI Photodiode 2 channels	 MSI-8 Gain setting: <b>4 GeV = 1 V</b>	Ions: 46 GeV PI: 1-6 GeV = 0.25 – 1.5 V CsI light output 50k/MeV PI quantum eff. 80% Si ionization energy 3.6eV Heavy ion quenching ~1-5	Hardware gain: x2 Software gain: x5 Shaping time: 1 us	2.5 – 15 V		~ ch. 2200 (expected: 1200 – overflow) 2200 corresponds to 2 GeV @ PI and quench factor ~ 3.5

Projectile

206Pb<sup>81+</sup>

T = 400.000 MeV/u  
Bρ= 8.06836 Tm  
mA = 205.93003 u  
A/Q = 2.5423

Change

Matter						
#	name	matter	density (g/cm <sup>3</sup> )	thick. (mg/cm <sup>2</sup> )	thick. (cm)	
0	Pad1	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
1	DSSD	Si	2.33	69.9	0.03	↑ ↓ ✎ 🗑
2	Pad2	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
3	Pad3	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
4	Pad4	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
5	Pad5	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
6	Pad6	Si	2.33	116.5	0.05	↑ ↓ ✎ 🗑
7	degrader	Ta	16.654	1.67e+3	0.1	↑ ↓ ✎ 🗑
8	CsI	CsI	4.51	4.51e+3	1	↑ ↓ ✎ 🗑
Add Matter						

Total thickness = 6944.3 mg/cm2

Total length = 1.43 cm

More...

Plots

+

Total Results

Projectile: 206Pb @ 400MeV/u 

Change

E<sub>out</sub> = 0.0000 MeV/u    E<sub>loss</sub> = 82372.0121 MeV    σ<sub>a</sub> = 0 mrad    Reaction rate: N/A

Bρ = 0.00000 Tm    σ<sub>E</sub> = 0 MeV/u    σ<sub>pos</sub> = 0.0071 cm

β = 0.00000    TOF = 0.021057 ns

Partial Results										
#	name	E <sub>in</sub> (MeV/u)	E <sub>out</sub> (MeV/u)	E <sub>loss</sub> (MeV)	σ <sub>E</sub> (MeV/u)	σ <sub>pos</sub> (cm)	σ <sub>a</sub> (mrad)	range (g/cm <sup>2</sup> )	σ <sub>r</sub> (g/cm <sup>2</sup> )	dE/dx (MeV/cm)
0	Pad1	400	390.102	2038.319	0.069	1.752e-5	0.598	3.217	3.055e-3	1.7
1	DSSD	390.102	384.115	1232.922	0.053	8.304e-6	0.471	3.1	2.947e-3	1.7
2	Pad2	384.115	374.052	2072.16	0.068	1.816e-5	0.62	3.03	2.882e-3	1.7
3	Pad3	374.052	363.878	2095.141	0.068	1.859e-5	0.635	2.914	2.773e-3	1.7
4	Pad4	363.878	353.585	2119.602	0.067	1.905e-5	0.651	2.797	2.664e-3	1.8
5	Pad5	353.585	343.166	2145.701	0.066	1.955e-5	0.668	2.681	2.556e-3	1.8
6	Pad6	343.166	332.61	2173.829	0.066	2.008e-5	0.686	2.564	2.447e-3	1.8
7	degrader	332.61	222.272	2.272e+4	0.233	3.278e-4	6.114	3.772	3.882e-3	1.2
8	CsI	222.272	0	4.577e+4	0	2.267e-3	0	1.898	1.927e-3	1.6