

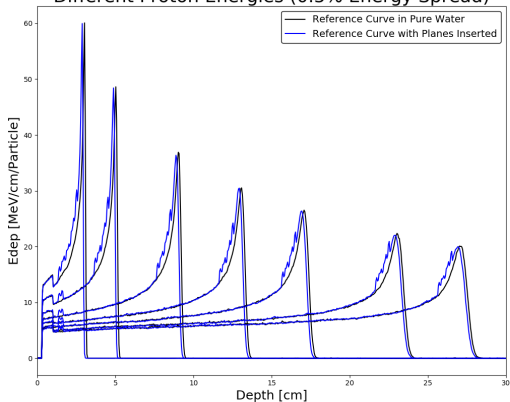
# SmartPhantom Meeting

Hin Tung Lau

August 14, 2019

## Proton: 1 mm Epoxy Extent on Both Sides of each Plane

Different Proton Energies (0.5% Energy Spread)

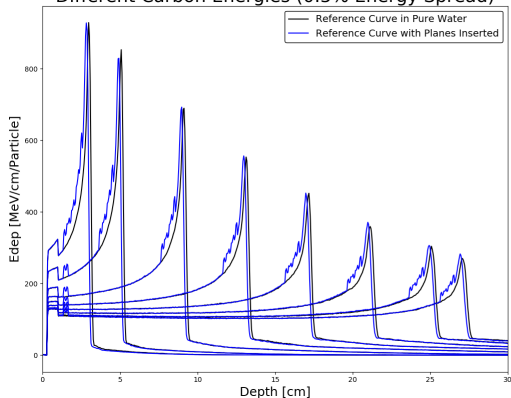


Potting Material	1mm Epoxy
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Energy [MeV/u]	Delta Depth [cm]	Delta Edep [MeV/cm/Particle]
62.4	-0.150	-0.117
81.3	-0.150	-0.204
111.6	-0.150	-0.542
136.8	-0.150	-0.042
159.0	-0.150	-0.151
188.7	-0.150	-0.337
207.0	-0.100	-0.096

## Carbon: 1 mm Epoxy Extent on Both Sides of each Plane

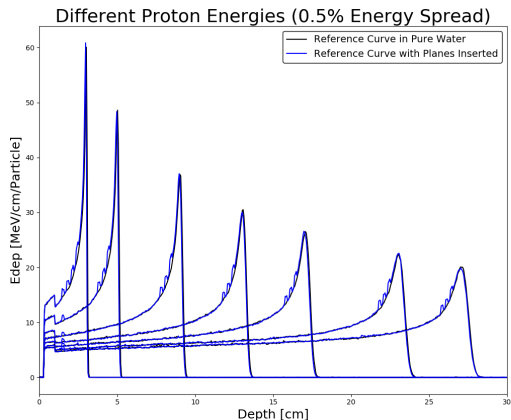
Different Carbon Energies (0.5% Energy Spread)



Potting Material	1mm Epoxy
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Energy [MeV/u]	Delta Depth [cm]	Delta Edep [MeV/cm/Particle]
120.0	-0.150	-0.957
155.9	-0.150	-23.926
213.4	-0.150	3.135
262.3	-0.150	3.250
306.2	-0.200	0.571
346.6	-0.150	11.621
384.5	-0.150	2.186
402.8	-0.150	12.478

## Proton: 50 micron Mylar film combined with 0.3 mm of Epoxy for each Plane

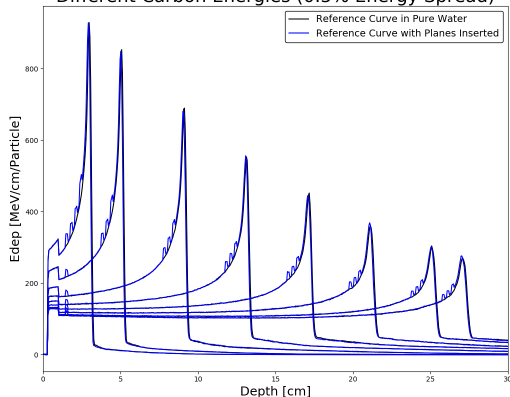


Potting Material	0.3mm Epoxy 0.050mm Mylar
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Energy [MeV/u]	Delta Depth [cm]	Delta Edep [MeV/cm/Particle]
62.4	-0.050	0.796
81.3	-0.050	-0.250
111.6	-0.050	0.164
136.8	-0.050	-0.481
159.0	-0.100	0.067
188.7	0.050	0.203
207.0	0.000	-0.202

## Carbon: 50 micron Mylar film combined with 0.3 mm of Epoxy for each Plane

Different Carbon Energies (0.5% Energy Spread)



Potting Material	0.3mm Epoxy 0.050mm Mylar
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Energy [MeV/u]	Delta Depth [cm]	Delta Edep [MeV/cm/Particle]
120.0	-0.050	-0.797
155.9	-0.050	-4.285
213.4	-0.050	-9.035
262.3	-0.050	3.011
306.2	-0.050	-7.217
346.6	-0.050	9.414
384.5	-0.050	-2.905
402.8	-0.100	6.048