

E02-013 Analysis Update

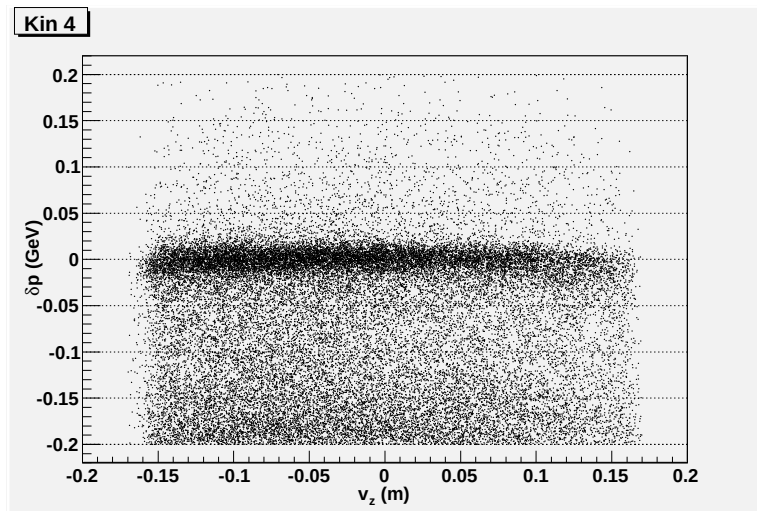
Seamus Riordan

March 18, 2009

- ▶ Reviewed optics with latest DC wire positions/ t_0 offsets
- ▶ Added in material around target to MC
- ▶ Starting to evaluate against data

Optics Review

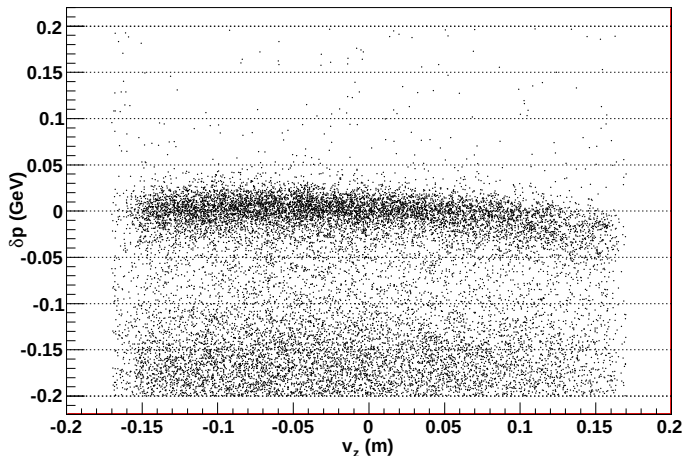
- ▶ v_z dependence seen in at least Kin 2
- ▶ Kin 4 looks mostly good



Optics Review

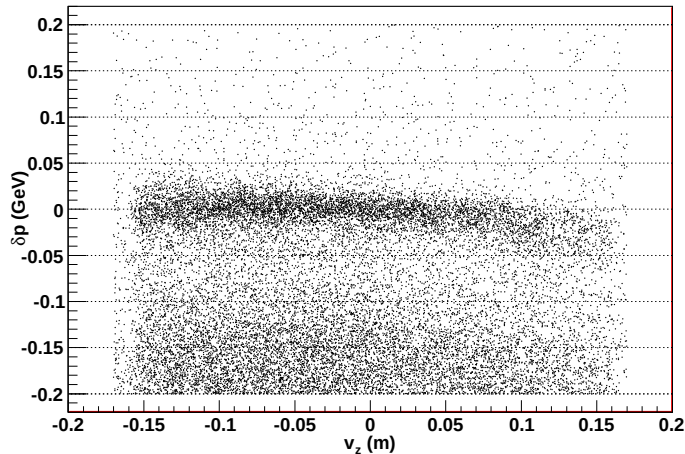
Kin 2 not so good at one end. Needs second order correction (cannot be done in present model)

Kin 2



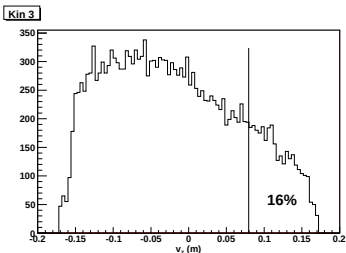
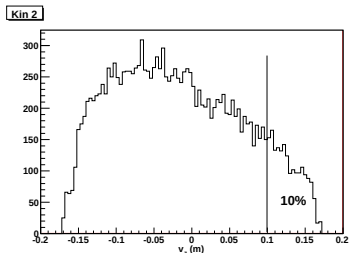
Kin 3 worse

Kin 3



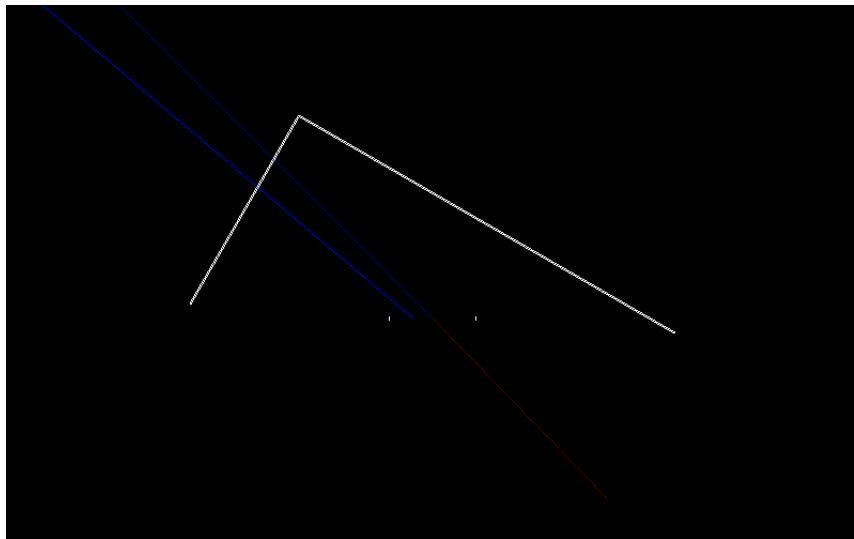
Optics Review

Best thing to do now would be just place a cut for now. 10 ~ 15% hit on statistics

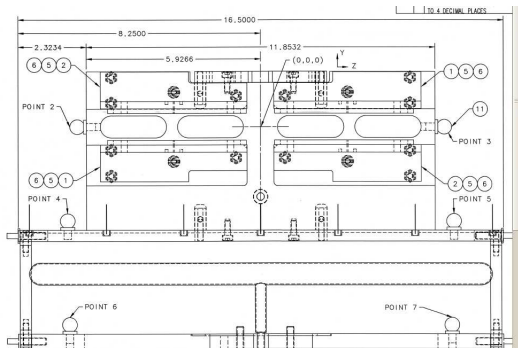


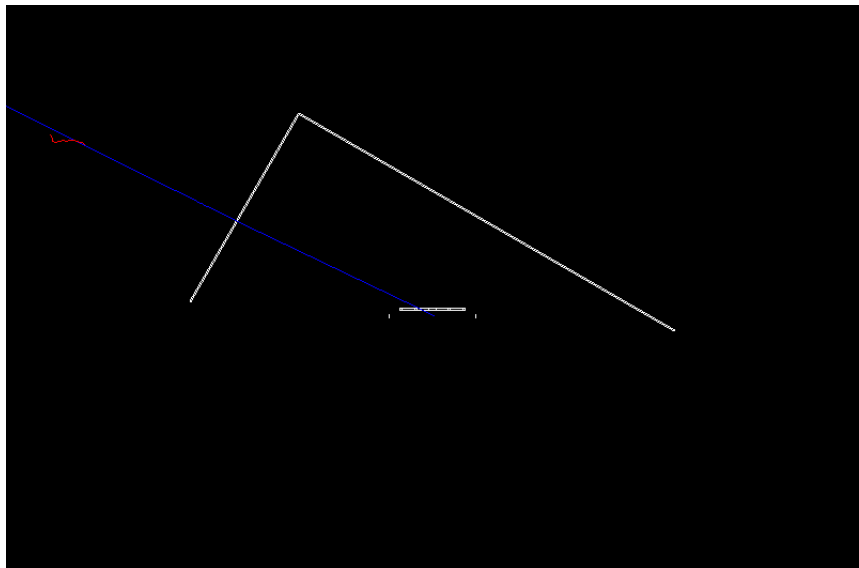
Monte Carlo Developments

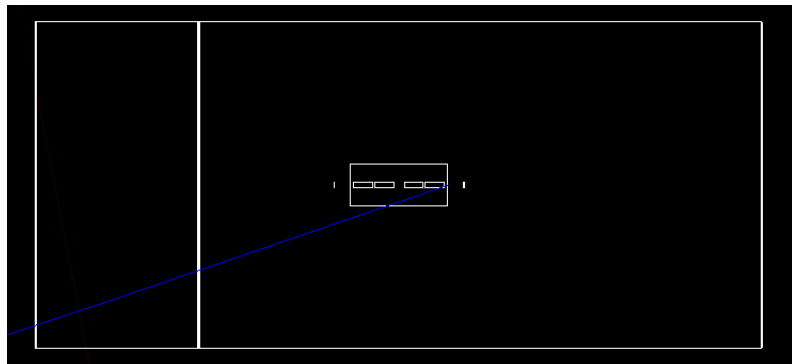
Added target box



Added target ladder ceramic piece for ^3He cell



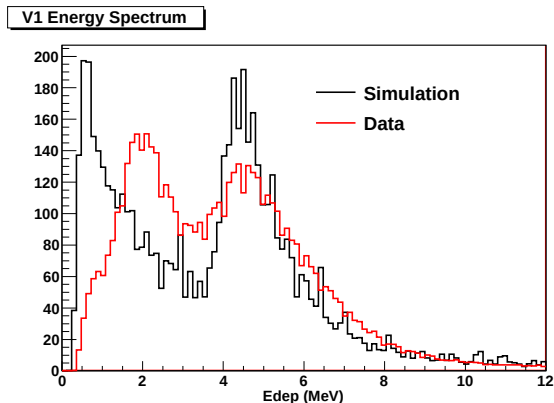




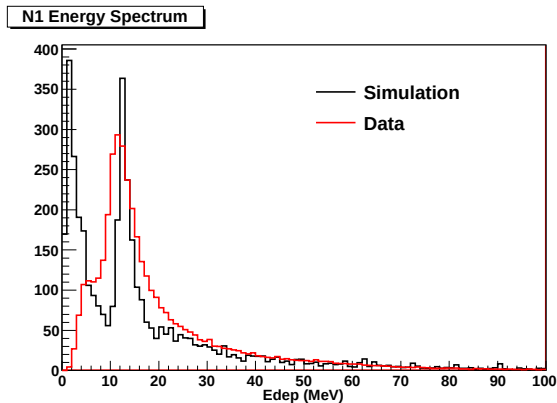
Monte Carlo Developments

- ▶ Background modeling needs some work
- ▶ Additional resolution factor needed for energy deposition?

Veto 1:

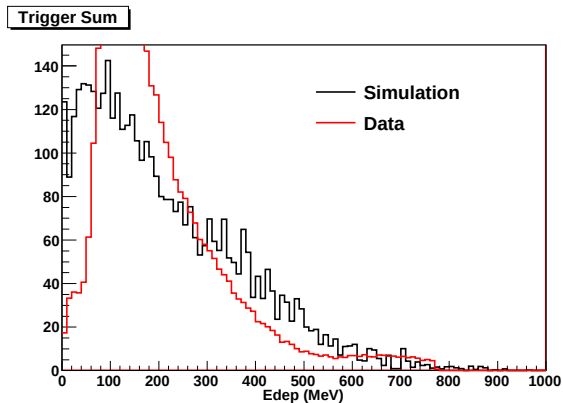


Neutron Arm Plane 1:



- Break trigger into summing modules?

Trigger Sums:



- Some agreement with data on NA response

	Data	Sim.
V1 Eff	0.974	0.949
V2 Eff	0.977	0.960
Elas. N1 w/ Any Veto	0.983	0.954
Elas. Cluster w/ Any Veto	0.958	0.947

- ▶ Fix background response
- ▶ Use GEANT for background spectra?
- ▶ Trigger sums response
- ▶ ^3He Target Response
- ▶ Need N_2 spectral function for MC