W Prototype Simulations

WHCal Coordination Meeting
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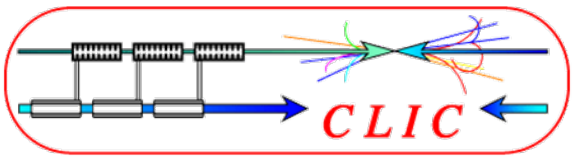
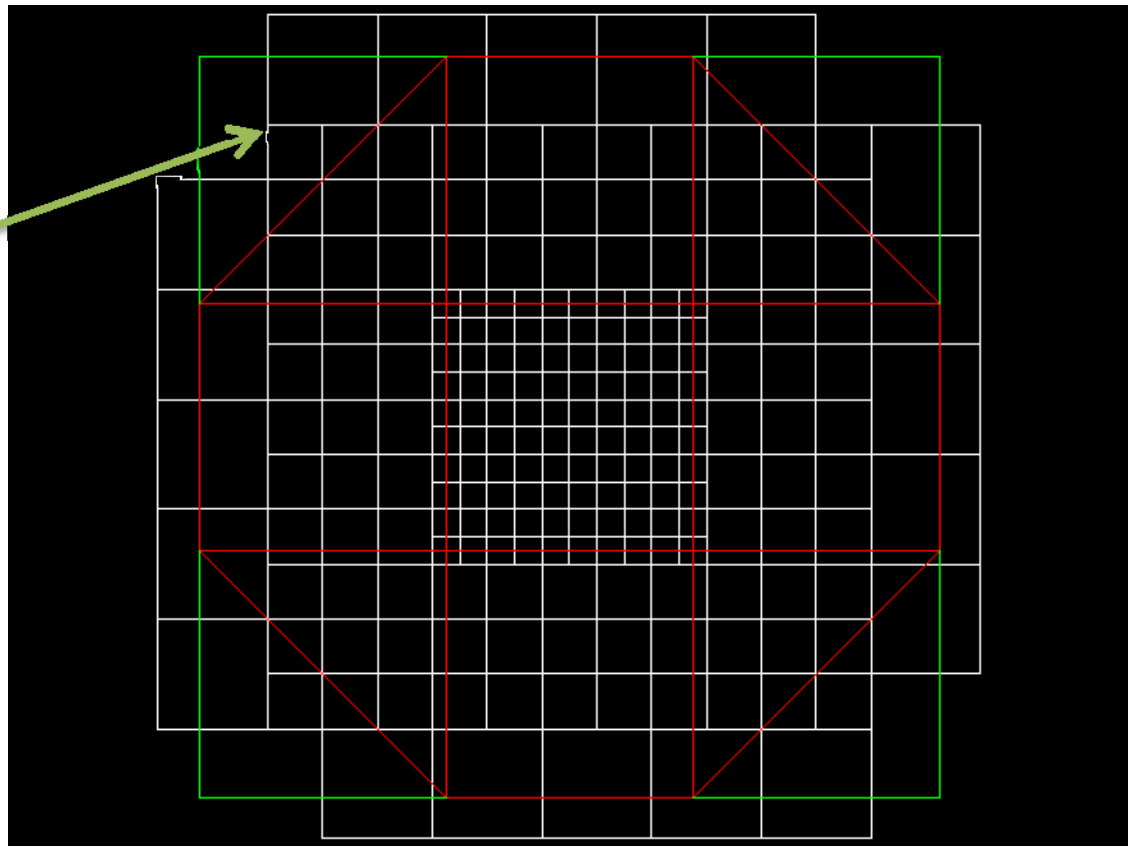


GEANT4 Model

- Using SLIC & compact.xml description
- In:
  - Correct tungsten mixture (94% W + 4% Ni+ 2% Cu)
  - Cassette material
  - 30 Layers
- Not in:
  - Corners
  - Cell sizes (3x3 cm^2 everywhere)

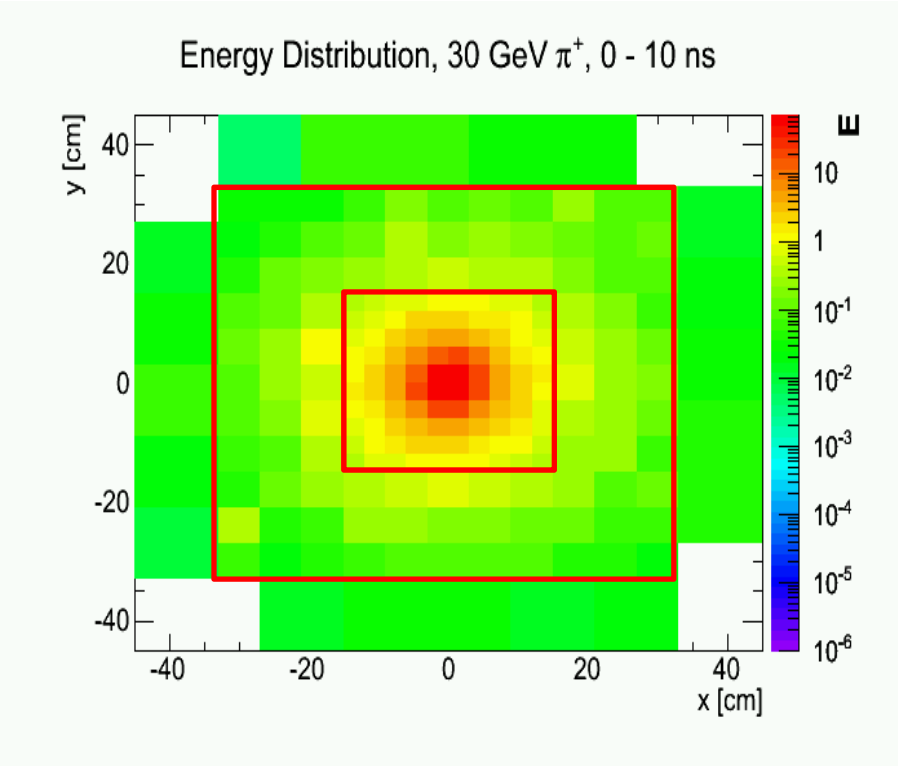


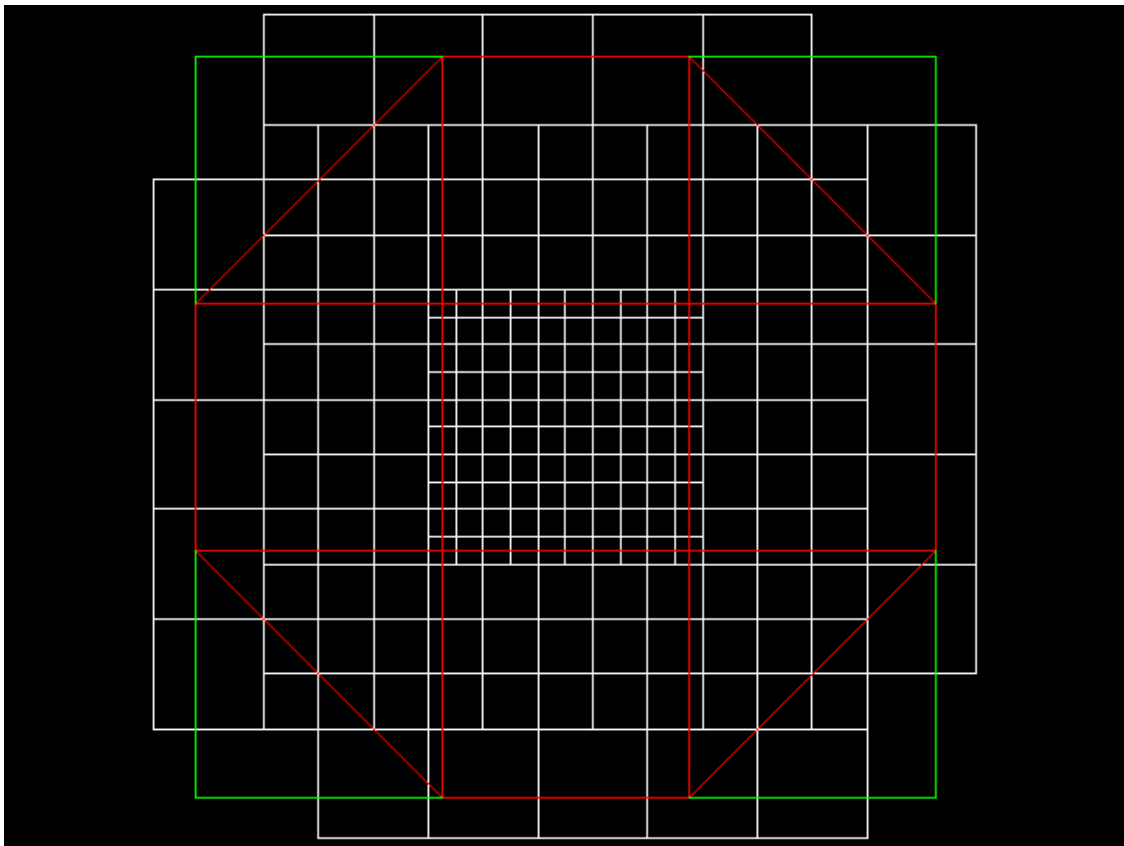
GEANT4 Model

- Compact.xml is easy and fast ...
  - As long as it is predefined shapes (boxes)
  - Absorber and Material have the same shape
- Ways out:
  - Can define each layer individually
  - Use existing Mokka driver & modify

Reconstruction

- Need to exclude 12cm cells + corners
- Almost no change to old studies:
  - Used 3cm + 6cm cells





Simulations

- Some simulations are done with new SLIC based geometry
  - Electrons & pions @ 10 GeV
  - No new results yet

ToDo List

- Implement geometry into Mokka & provide it to experiments behind
- Include realistic beam parameters (beam spread)
- Which energies to simulate?
- How many events?