Momentum Resolution

Slope not as crucial for soft tracks

Resolution constant b:

- PID space and Calorimeter size ($$) limit L, n
- $B = 1.5$ Tesla to maintain good resolution.
- Many layers (small cells)

Can maintain acceptable value for b

Soft tracks benefit most from small a.

$\rightarrow$ low-mass detector

Multiple scattering constant a:

- He-based Gas
- Al field wire
- Thin inner gas seal (link to vertex detectors)
- Thin outer gas seal (link to PID)

Can make big improvement with new gas, *if* σ is OK.