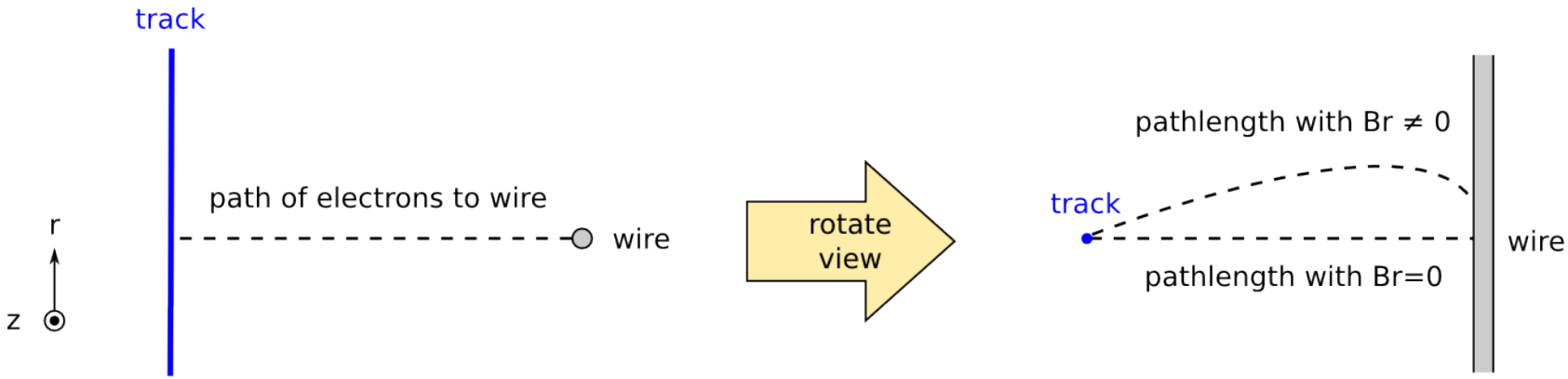
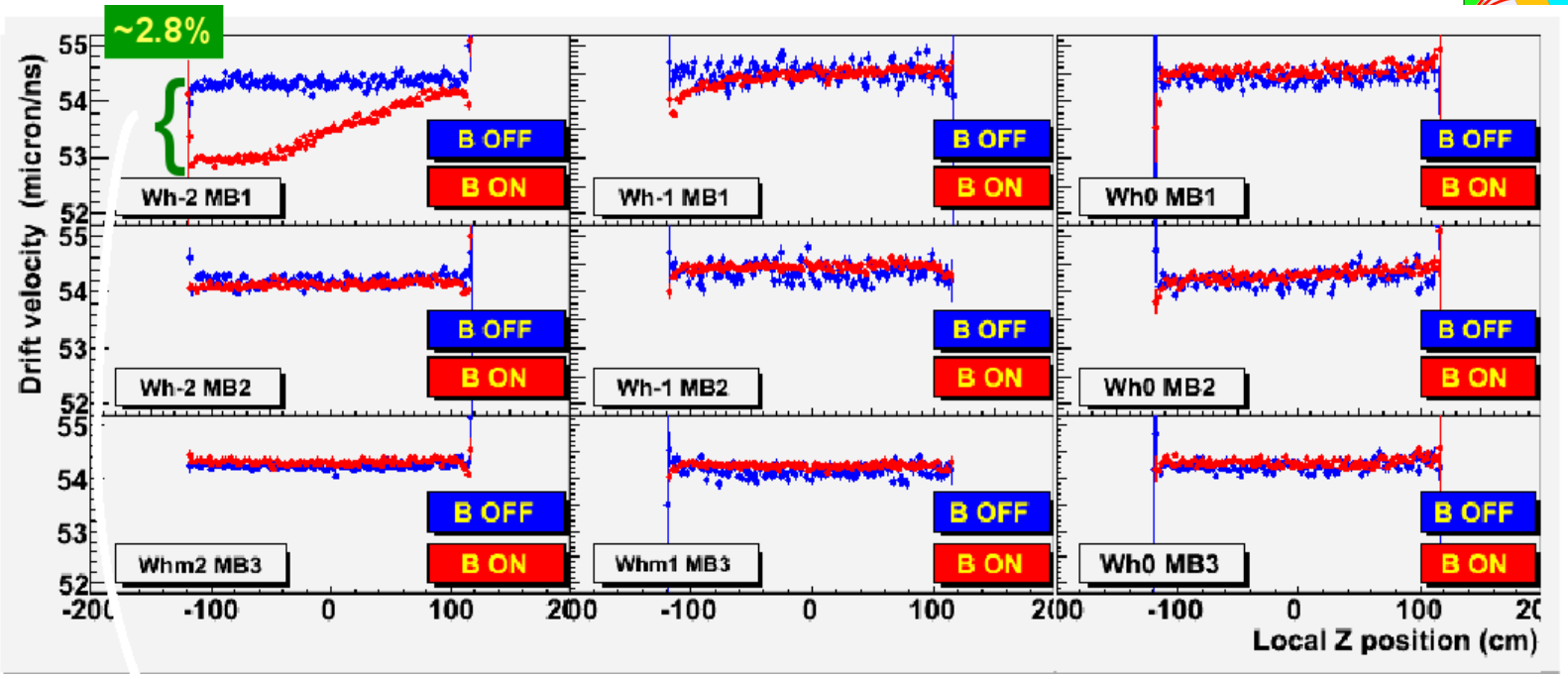
What about B_r errors?

Inside of a DT drift cell:

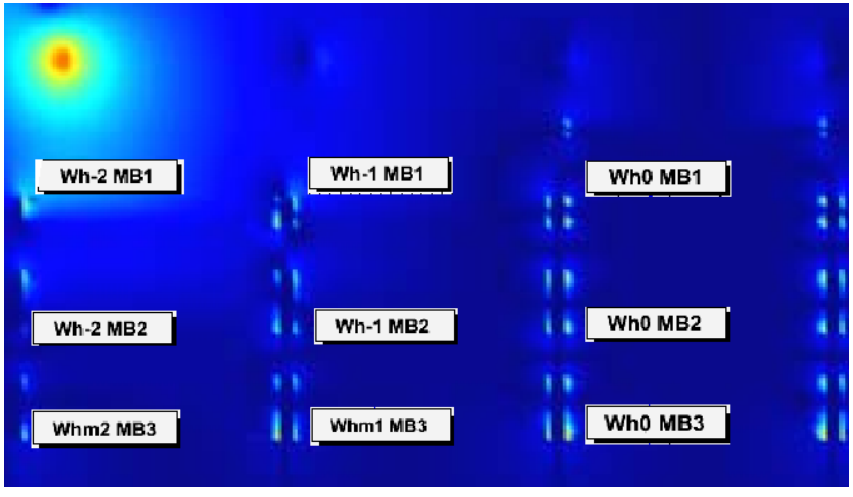


- While muon momentum may be parallel with the radial direction, current of electrons drifting to wire is always perpendicular
- Path is distorted by field, yielding a reduction in the apparent drift velocity (when computed as distance between track and wire/drift time)
- Variations in v_{drift} are sensitive to B_r, including any error with respect to simulation
- Independent of misalignment, though not a cross-check (because this is B_r, not B_z)

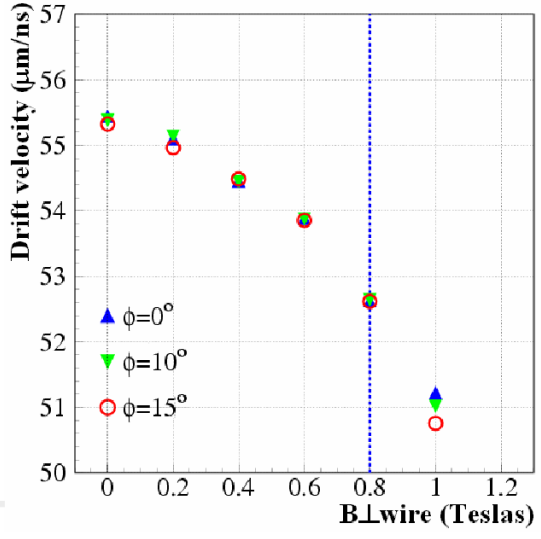
Qualitatively reproduces B_r map



Field map:



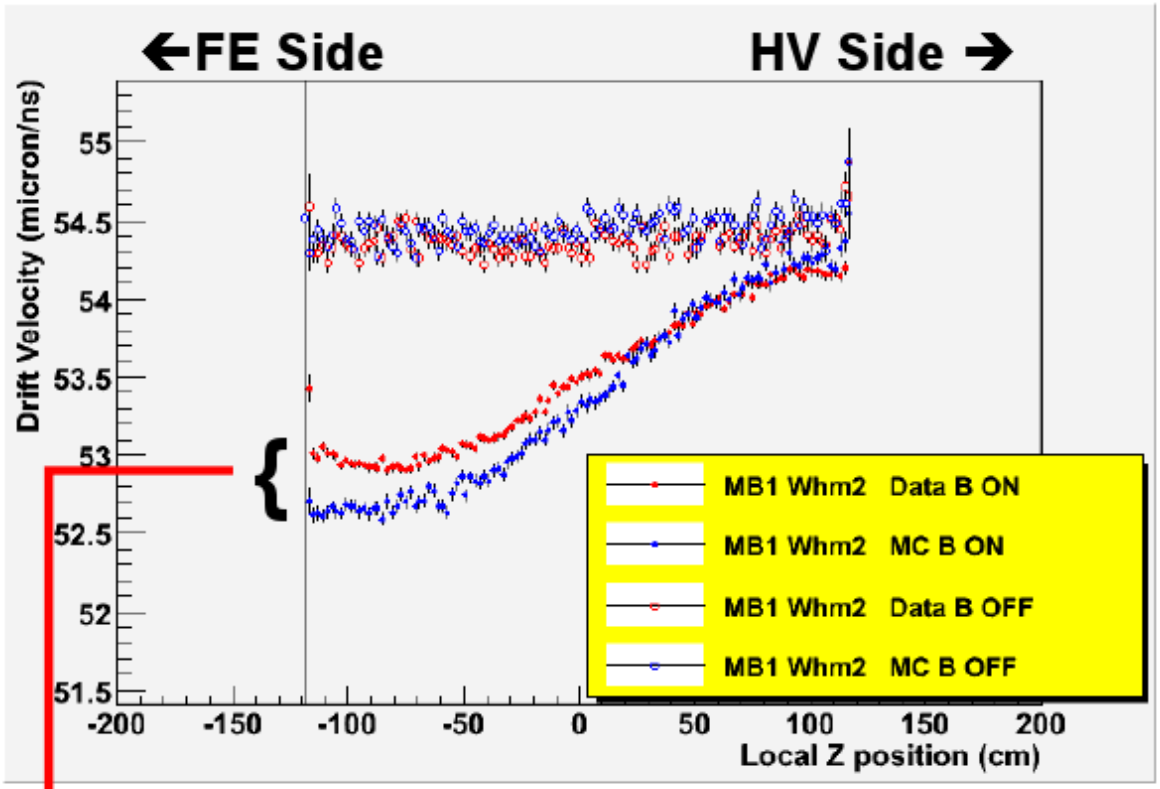
Conversion to B_r (test beam):



Mary-Cruz Fouz

B_r is also smaller than simulation

but only in high-field chambers



Wh +2, -2:
Smaller effect from B in data than in MC

It seems that B inside the MB chambers is lower than expected