

Software Issues for the DBD

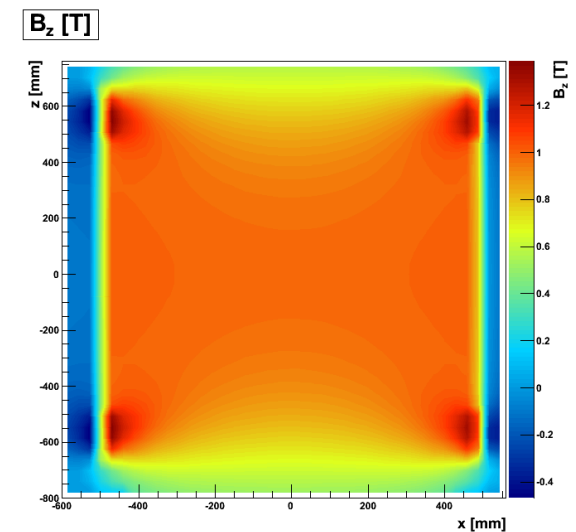
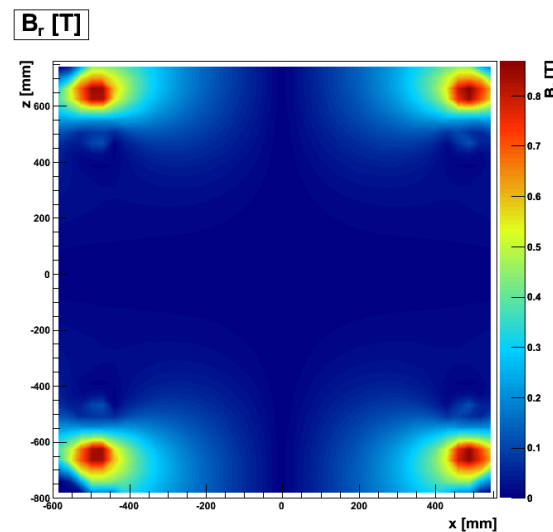
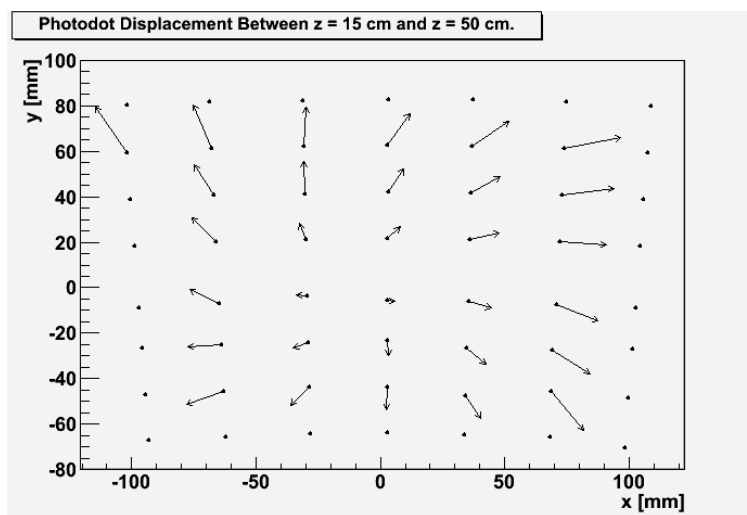
LCTPC Collaboration Meeting

March 27th 2012

Ch. Rosemann, DESY



- Alignment
 - Use measurements with and without B field
 - Use external reference system
 - Iterative procedure: Fit \rightarrow determine alignment parameters \rightarrow Re-Fit
- Calibration
 - Crucial for resolution
 - Measurements with photo dot system show large effects (Jason Abernathy)
 - Calculations (e.g. by Keisuke) show the very clear need



- **Calibration and Alignment tools**
- Cross-site ability to reconstruct, analyze and compare data
 - Data location table (with additional information) incl. run list
 - LCIO data, GEAR, channel mapping (database) + steering files
- Proper error calculation and propagation through complete chain
- Documentation – Tutorials? Examples?
 - Help the wiki: <https://znwiki3.ifh.de/MarlinTPC/>
- Technical tasks for test beam operation:
 - Quick checking → standard reconstruction chain
 - Standard logging of conditions data including conversion