Track Finder Visualization

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- Goal:
  - Allow user to “step through” algorithm, displaying info at each step
  - Motivation: Allows us to easily see how changes in the algorithm affect various aspects of it.
- Accomplishments:
  - Some buttons
  - Residual View
- To do next
Goal

- Allow user to “step through” algorithm.
- Motivation: Allows us to easily see how changes in algorithm affect certain aspects of it.
Display

- Units: cm
- Road is black rings.
- Seed rings are green/red.
- Track is red.
- Hits are blue.
Accomplishments

Stepping through algorithm
Accomplishments

Displaying info: Residual view, r-phi

- Radius vs. res(\phi) b/c track’s seed rings are barrels.
- No errors displayed yet.
Accomplishments

Displaying info: Residual view, z-phi

dr = 0.610160 dz
kz = (phi - phi0)
k = -0.001154
phi0 = 1.525998
To Do Next

- Add errors to residual view.
  - How are errors stored?
  - More info about detector geometry:
    - sigma in pitch direction
    - stereo angles
- Allow user to step through merging process.
- Start running fitting/further pattern rec.