

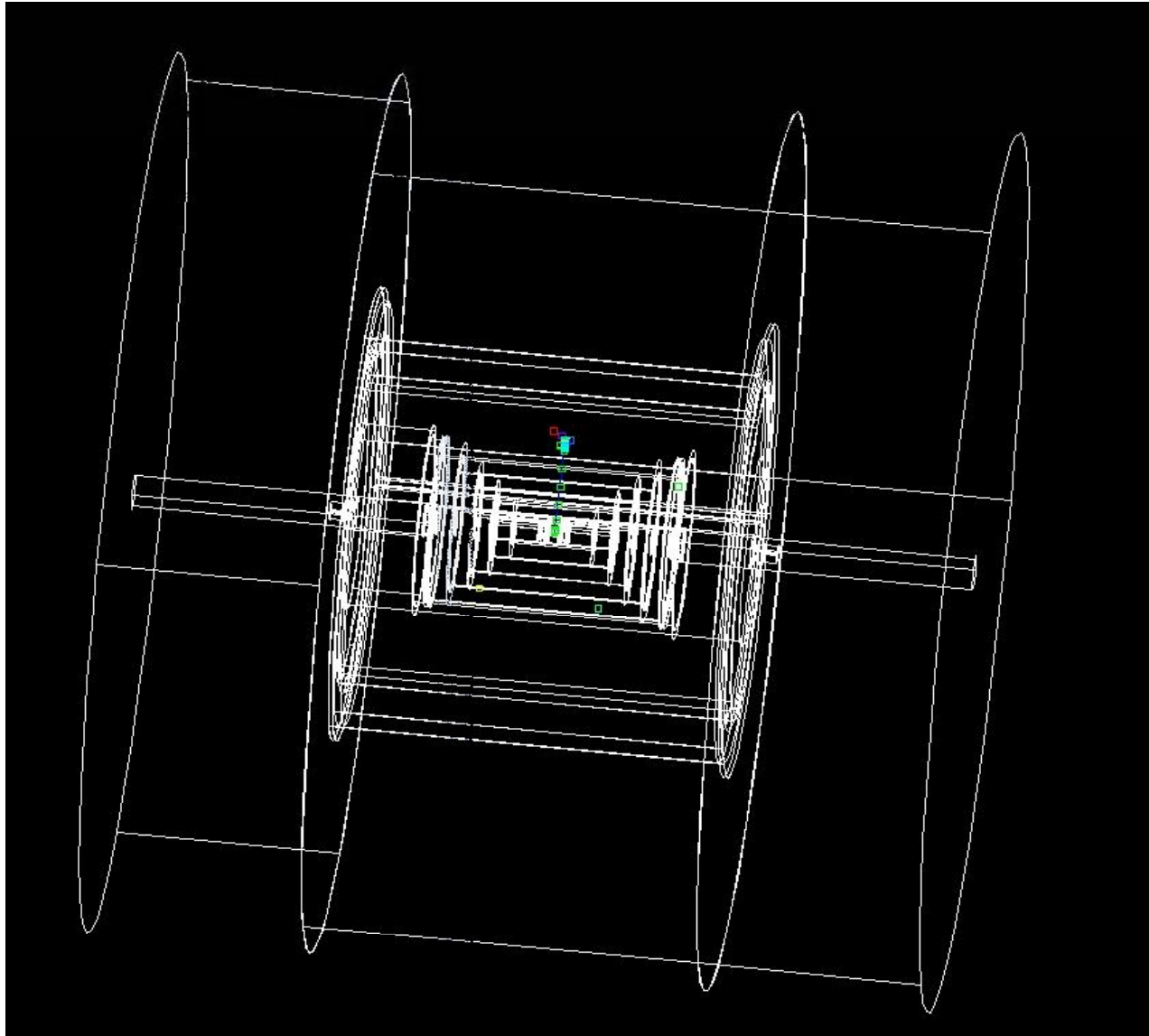
Detector Description

Danny Crow

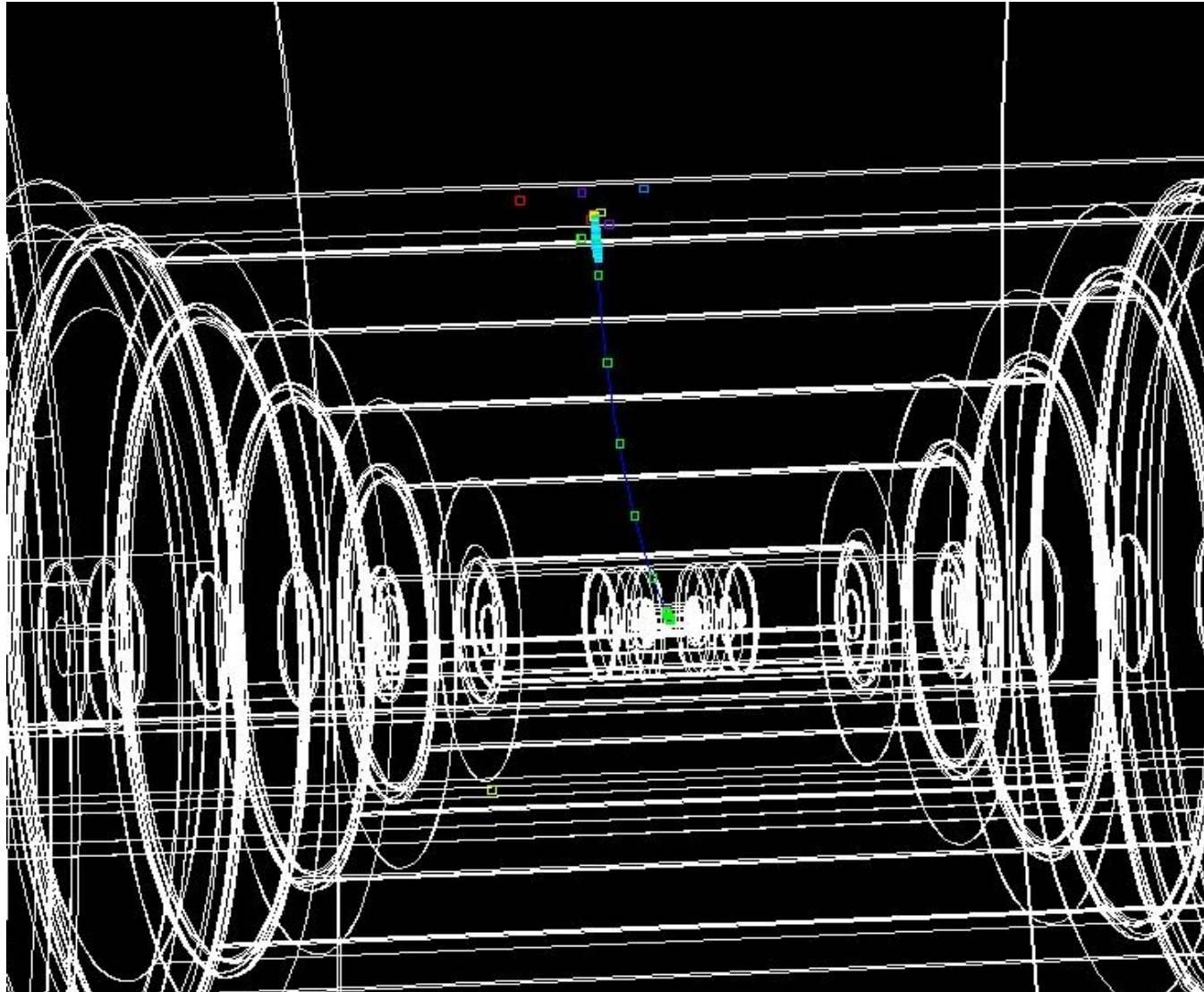
The Task

- I have been editing .xml files which we convert to .lcdd files (Linear Collider Detector Description) using GeomConverter. These .lcdd files contain both geometric description and optical properties. We use these .lcdd files to run simulations using SLIC. The original .xml files come from Adam and from the SLIC website.

Original Detector



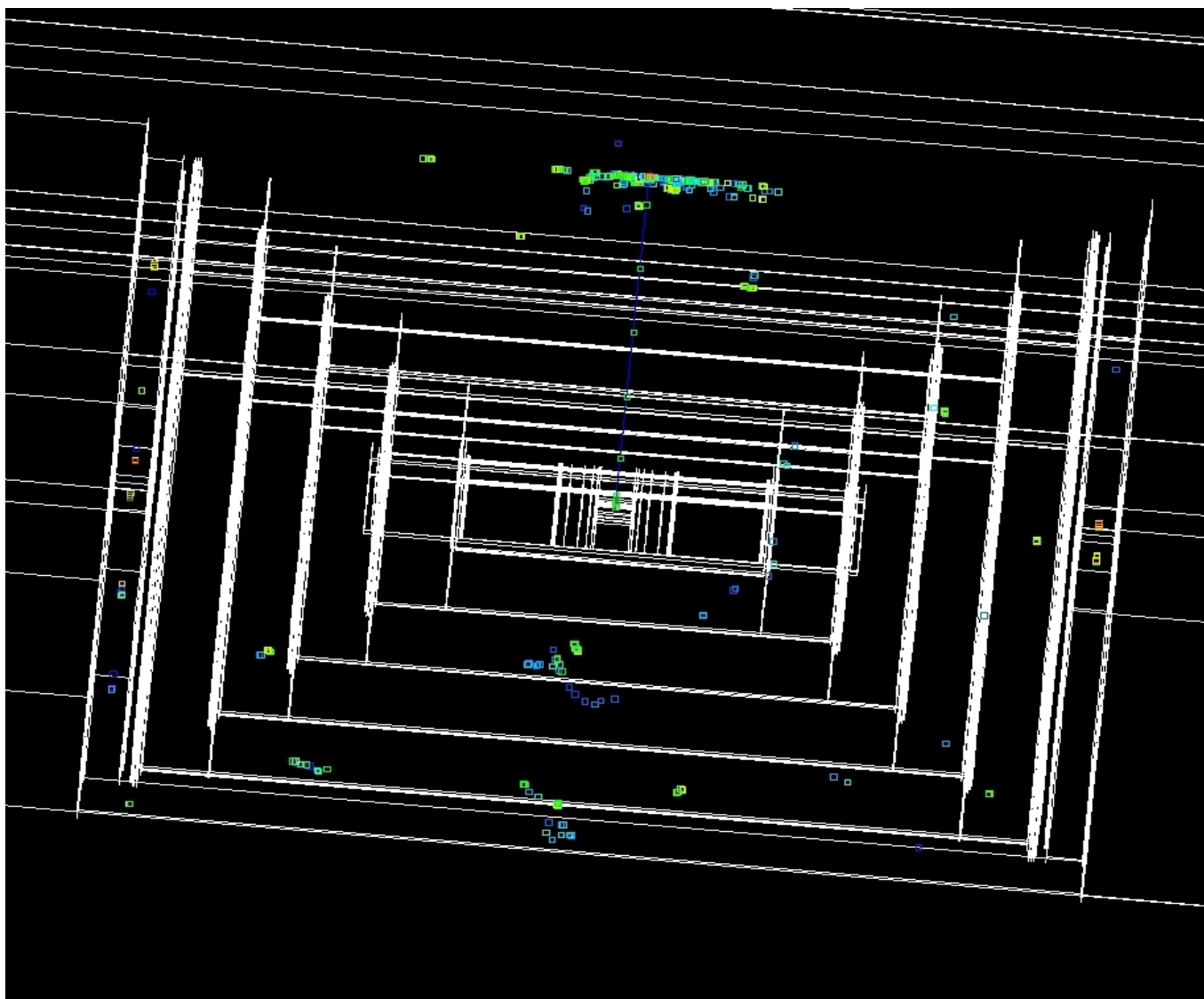
Simulation with 2 GeV Pion



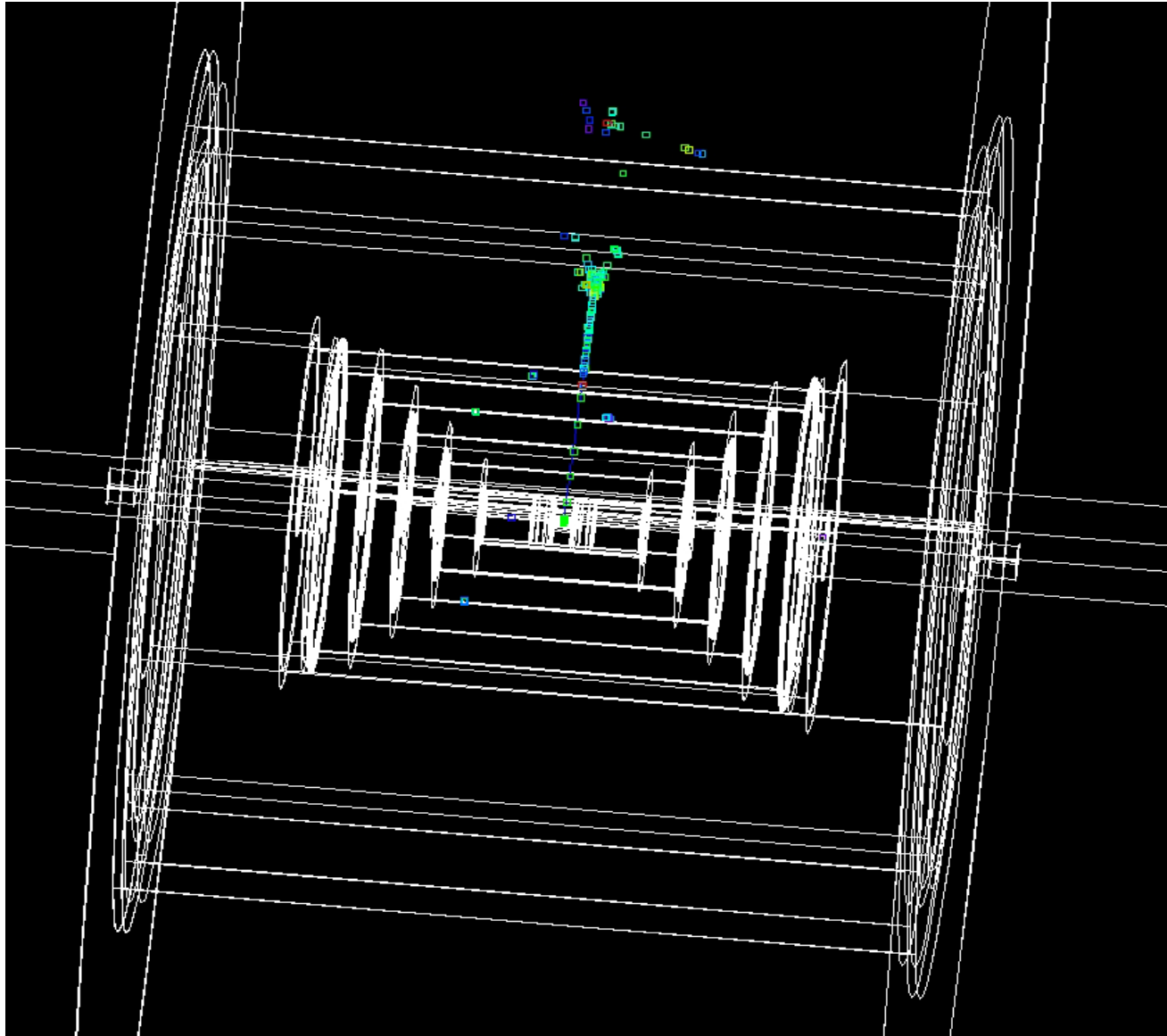
Changes

- The first changes were made to the EM calorimeter. The original code design included many small layers with many slices. Now, there are larger, single slice layers, which are all sensitive.

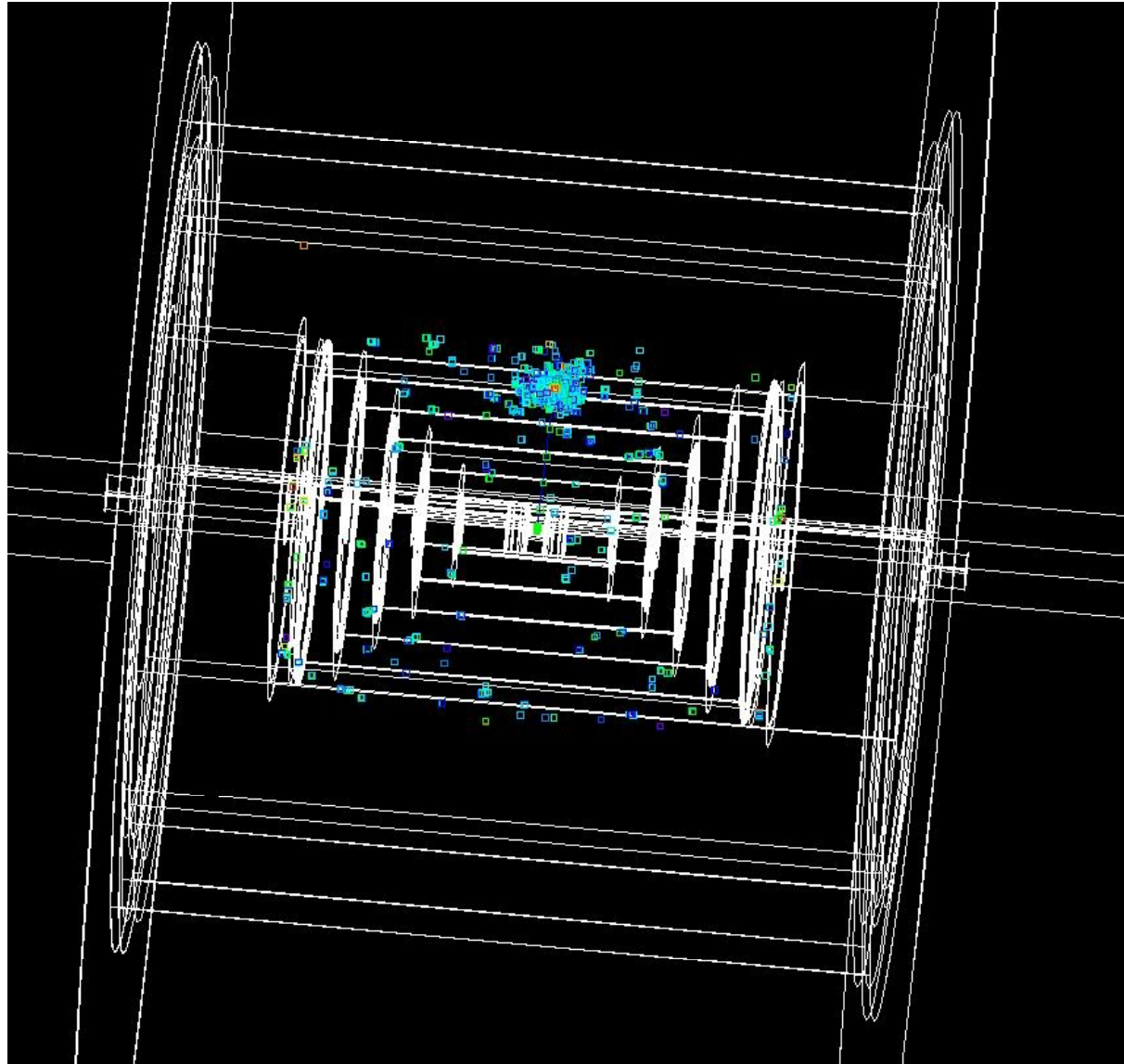
Updated Detector



20 GeV Pion



20 GeV Pion



Future Changes

- Update geometry to match Adam's exact specifications.
- Fix optical properties for crystal
- Examine particle trails