

# **UC Santa Cruz SUSY and Geometry Update**

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# Current Status of Geometry

- Entire IR has been successfully aligned to the outgoing beampipe
- Two versions of the geometry currently exist:
  - BeamCal at 3.265 meters for  $L^*$  of 4.1 meters
  - BeamCal at 2.775 meters for  $L^*$  of 3.5 meters

Both are in the process of being simulated.

Reconstruction and occupancy studies will follow

- Looking into how to modify the plug region of the detector for further studies

# Current Status of SUSY studies

- Tim has provided susy stdhep files for stau simulation
- Currently working on gamma\_gamma->hadron studies
  - With 1 event per crossing, there are about  $10^{11}$  per year, which is unreasonable to simulate.
  - Looking at a way to limit the phase space of generation/simulation through kinematic restrictions