2019 Reach Estimate

1. 2019 Geometry
    a. Update conditions database (Omar/Jeremy)
    b. L1 positions (Matt S.)
    c. Hodoscope (Maurik et. al.)
        i. Merge iss40 (Done)
        ii. Detector iss353 (Matt S. approve pull request)
        iii. Readout code iss166 (Kyle)
    d. Driver to mask out L0 strips for 17.5 mrad (Matt S.)
2. MC Generation (Takashi/Brad)
    a. Tridents 10%
    b. Displaced A's
    c. Radiative and wab MC (for radiative fraction)
3. Reach Estimates (Matt S.)

It would be ideal to start MC generation by the end of the week.

2016 To-Do

1. Pass2 Quality (all)
    a. Target position (Norman)
    b. Where is the Ecal (Nathan)? Beam tilt/location? (all)
2. MC Quality (all)
3. Reach Estimate L1L1 (Matt S.)
    a. Need Pass2 10% and displaced A' MC
4. Mollers (Norman/Bradley)
    a. Mass Resolution + Moller Mass (Norman/Bradley)
5. Event Selection
    a. Start with 2015 cuts
    b. Validate/tweak cuts
    c. Take advantage of correctly computed errors
    d. Isolation Cut (Matt S.)
        i. Also use 2015 data
        ii. Working on refitting the track with other hits
6. L1L2/L2L2 (Matt S.)
    a. Also use 2015 data
7. Radiative Fraction/Trident Rates (Rafo/Matt G.)
8. Very large trident sample 2015/2016 (Holly)
9. Machine learning (Matt S.)
10. SIMPs and Generalized Displaced Vertices (Matt S.)
11. Systematics

12. Blinded Analysis

MC Needs 2016

We need to know target position, Ecal position, and beam direction

1. **A’ displaced (uniform distribution out to 200 mm)**
2. Tritrig-wab-beam 10%
    a. Tritrig-wab-beam 100%
3. A’-beam displaced
4. Tridents (100%)
    a. Tridents x10 (biased?)
5. Rad-beam
6. Tritrig-beam
7. Wab-beam
8. Wab-beam-tri (20 s?)