Purpose of Workshop

- Get focused on 2019 data analysis
  - 2016 analyses are ballistic...need much quicker turnaround for 2019 (4 years ain't good!)
- Organize what we need to pass jeopardy
  - What performance plots do we need to show that our detector works the way it needs to
  - What reach estimates should we get and best way to get them

Worshop Logistics

- Monday, Tuesday, Wednesday 8am-noon PDT/11am-3pm EDT
- https://indico.slac.stanford.edu/event/355/
  - If you can't post here, send link to me and I'll upload it
- https://bluejeans.com/2481822377

Workshop Agenda

- Day 1: Calibrations/Conditions and MC
- Day 2: Tracking improvements/performance and data/MC comparisons
- Day 3: All about jeopardy

The agenda is only a rough approximation...some talks will go longer, some slots will be just discussion.

What we need from 2019 data and 2019 detector MC

- Calibrate and process enough data to be able to show that the vertex resolution is what was expected/promised with L0 upgrade. Need a vertex distribution of e+e- pairs with a fit to the core of the distribution
- Show the invariant mass distribution of e+e- pairs to demonstrate mass coverage of 2019 data
- Show Esum for e+e- pairs with and without e- cluster to demonstrate that the single arm trigger worked and we gain x2 more pairs
- Validate MC setup using the Esum, vertex, the invariant mass, … distributions of e+e- pairs using the 2019 data
- Run simulations for 4.55 GeV to show preliminary agreement between the data and MC
- Simulated long leaved A's to show increased acceptance after moving L1, L2, L3 towards the beam
- Estimate 2019 reach
- Estimate reach for a 4 PAC weeks of running at 3.7 GeV (2021 run)
- Estimate reach for two more energies, ~2 GeV, ~4.4 GeV – after 2021 we will be left with 105 PAC days