

Things to do:

- Get notes from people what they presented
- Upload abhishek's written report
- Compile textbook list

Topics to review:

- Alpha s value comes from what
- Tracking uncertainties

Presentation Notes & Questions:

- Electroweak interactions
- Baryon chemical potential (BCP)
 - Why is LHC at ~ 0 BCP?
 - Why are the number of anti quarks and quarks generated equal numbers?
 - Are they generated equally? YES
- Identify what is wrong with hadronization process in Clayton's slides
- What particles produced are affected by the QGP (based on their decay times)? Z bosons decay too rapidly to interact with QGP and aren't affected. J/psi, and c-cbar, production will be affected by QGP because decay times are long enough.
- What questions did Abhishek and Clayton get on evolution of HI collisions and QGP in colliders?
- Why pseudorapidity instead of rapidity?
- Active and passive boost? Mathematical and physical difference
- Phi distribution is uniform for nonpolarized incoming particles
- Why is lead, gold, and H used in collisions? Why not collide other ions?
- Centrality table determined by HF energy sum, should have more energy in the forward directions for more peripheral collisions and less HF energy for central collisions
- Five signatures of QGP: Anisotropic Flow, Quarkonia suppression, jet quenching, strangeness enhancement
- Can you have a 1 jet event? Like a photon + single jet event for example
- S, T, and U diagrams and mandelstam variables
- Describe Ncoll and Npart