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Current working:

1. Measuring data from cms = 3.682 GeV, only few events survived after all selections. The result was compared with data from cms = 3.650 GeV but is less than it. In a discussion with Prof. Wang, he suggested to neglect the qed background. Although there are many events survived from cms = 3.773 GeV, however if we combine results from 3 energy points (3.650, 3.682, 3.773), we think there is no powerful evidence to rule out the possibility that these events were decayed from psi(3770). So in the future analysis, I will not consider background from qed process.

2. QED3773 contributions were removed from background. Now there are only inclusive MC events contribute to background. The background level is about 3%. A new result was gotten after several iterations of pwa. There are 6 states in the result: Lam1520 and Lam1670 from pK combination, Lambar1670 and Lambar1690 from LambarEta combination, Nm1875 from KLambar combination, K0sm1430 from Keta combination. In addition, there is also a significant bulge on invariant mass spectrum of pEta. I consider it as Np1520 or Np1535. However, both of the significance of these 2 candidate states are less than 5σ, so they are not added to the final result.

3. Every states in the pwa result were measured again to get their accurate significance. However the significance of Lambar1690 from LambarEta combination is less than 5σ. This state was used as a member of basic result in pwa, its mass is close to Lambar1670. In former analysis, we think the peak is closer to 1690 rather than 1670. However, the latest result shows that the significance of Lambar1670 is larger than Lambar1690 for LambarEta combination. So I have to correct the basic result and repeat pwa again.

Next planning:

1. Checking and testing whether tf-pwa package can be used to do 4-body pwa. (Need more theoretical knowledge.)

2. Repeating pwa again with new basic result.

3. Trying to explore the bulge around 1.530 GeV on invariant mass spectrum of pEta.