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Current working:

1. Renew pwa results with a new method, some potential problems will be avoided by the new method.

2. Remove K0sm(1430) from Keta combination. The width of this particle is 270±80 MeV. Its wild width means it can be used to describe a phsp distribution. From the plot, we think it actually describes a phsp distribution but not a resonance. The resonance is removed by this reason. And the phsp component in the process will be described by other 2 simulated non-resonances from pK and Lambdaeta combination. Now we have 4 particles (Lam1520, Lam1670, Lambar1670, Np1535) and 7 channels in the pwa solution (2-body deacy: 2, 3-body decay: 4, 4-body phsp: 1).

3. We try to remove Lam1690 from pK combination, and only reserve Lam1670 from pK combination. Because in the latest result with the new method, Lam1670 has a bigger significance than Lam1690, the NLL value is also smaller. The result that includes Lam1670 can be fitted better than the other. There will be another situation that both Lam1670 and Lam1690 are exist. This process will be tested latter.

4. The fractions of each decay channel components are already calculated.

5. Generate exclusive MC for channels in pwa result. Prepare for estimating uncertainties for each channel.

Next planning:

1. Read books about PWA and QFT to learn more knowledge.

2. Estimate other kinds of systematic uncertainties in the analysis.

3. The uncertainties of each channel will be estimated in the next step.