

# Preparations for mass reconstruction

- Talini Pinto Jayawardena has extended Frank's **steering file to run the Vertex Package with its current parameter settings on multiple sets of input (jet-)RP collections** → see her post to ILD software discussion list of 6<sup>th</sup> May
- a **new tag** of LCFIVertex will be provided by the end of the week:
  - LCFIVertex v02-02 does not compile due to a wrong variable name in LCFIAIDAPlotProcessor, corrected in the HEAD version
  - this processor is currently incompatible with RAIDA; this is being fixed for the new tag
  - Victoria Martin has also been working on **further diagnostic tool for vertexing**: tables showing the purity of track-to-vertex association; this will be finalised on same time scale
- please include the new version, run with the steering file, in the tests of the **full chain for mass reconstruction**

## Further plans

LCFI is working on a **tuned configuration of the Vertex Package:**

- Kristian Harder is making progress with processor to identify **tracks from photon conversions,  $K_S$  and  $\Lambda$  decays**, so these can be removed before running ZVTOP
- current release version removes these for the calculation of the flavour tag inputs
- Comparisons with Kristian's identification processor shows current procedure is already very efficient
  
- Roberval Walsh is working on **parameter tuning and network retraining:**
  - track selection for IP fit and vertex finder ZVRES nearing completion
  - tuning of parameters for ZVRES about to begin
  - will need to be redone when Kristian's processor has been finalised
  - Roberval will show detailed results from these studies at ECFA workshop in Warsaw