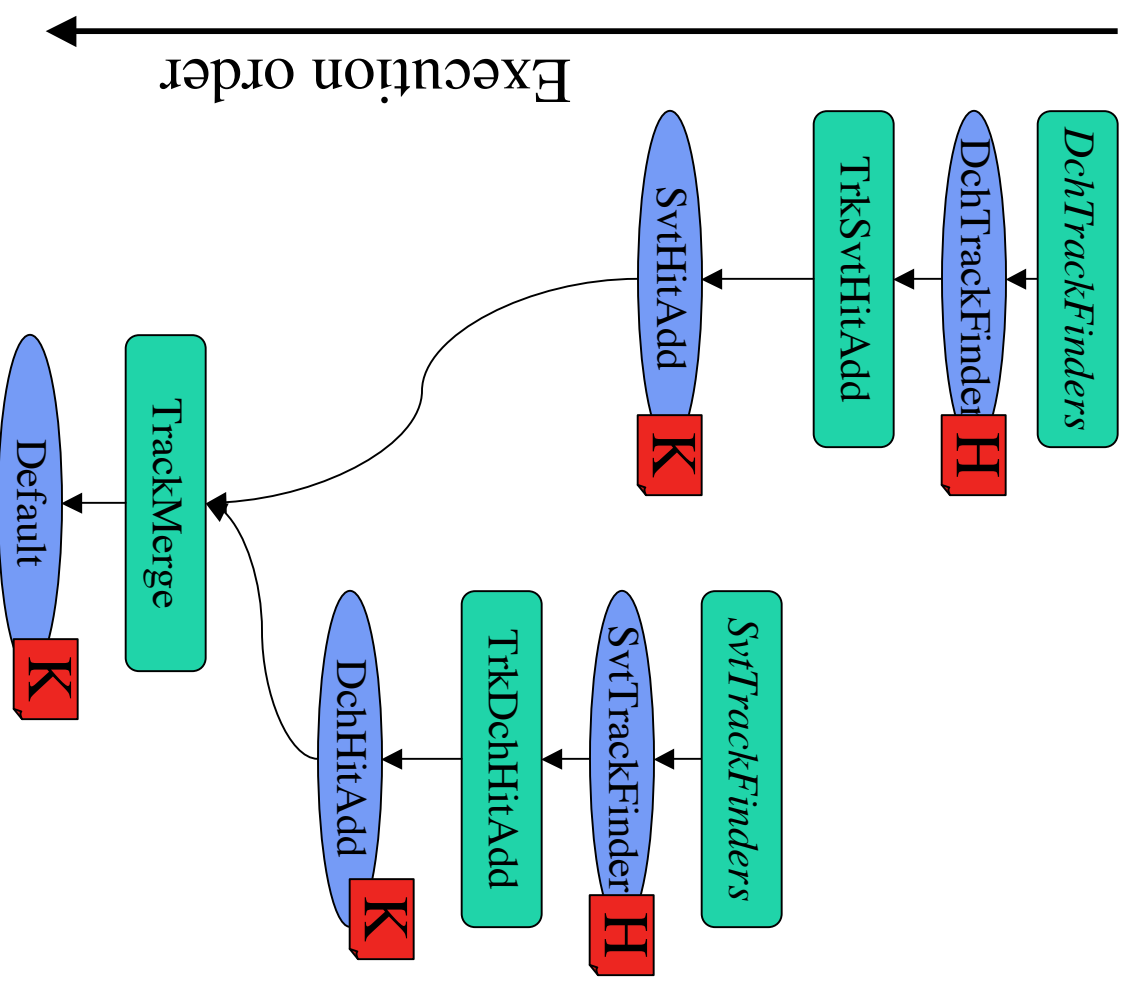


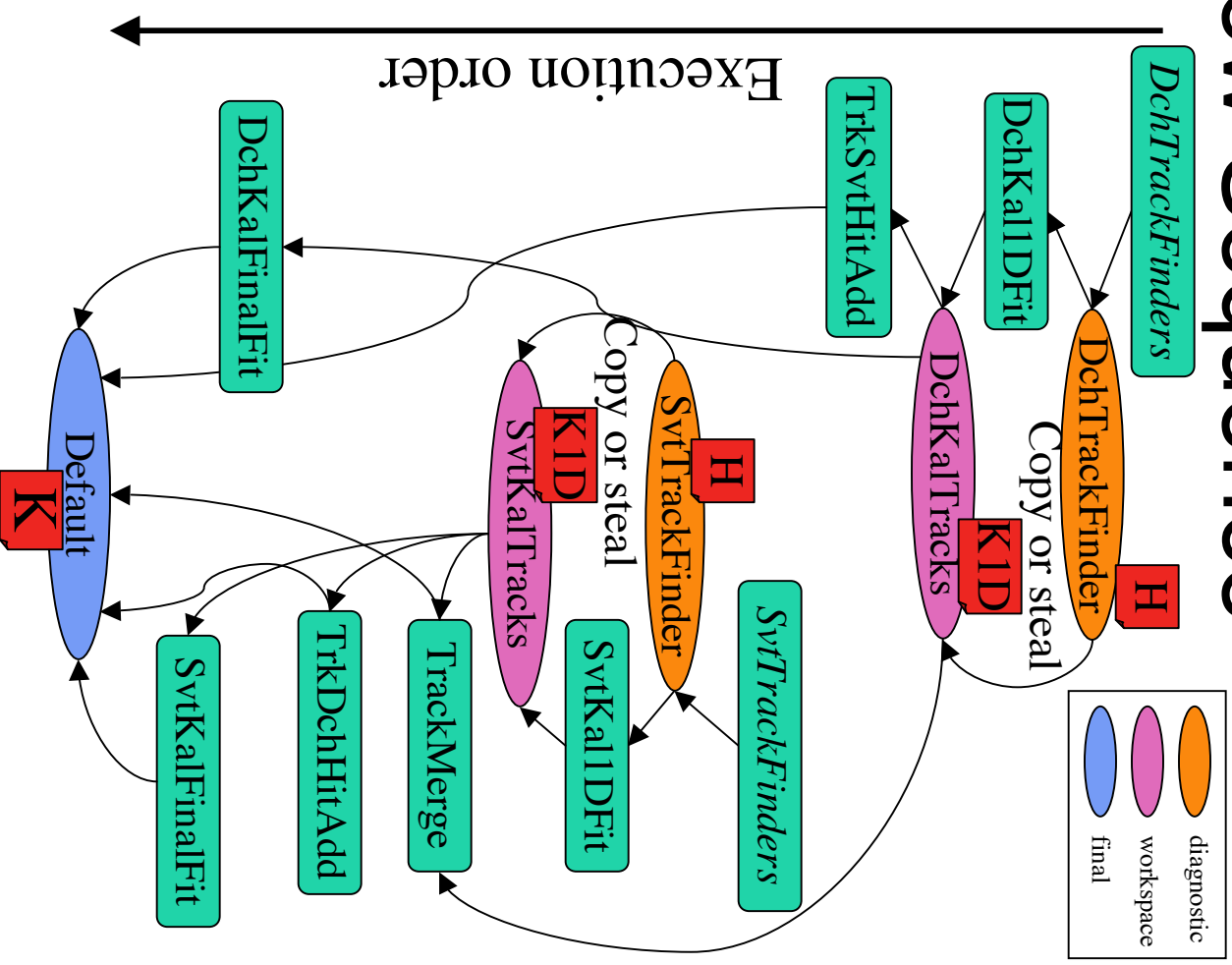
# Current Tracking Sequence

- ◎ The current sequence couples a module's place in the path with its configuration
  - ◎ Reordering the sequence requires 'invasive' tcl
  - ◎ Adding new modules is problematic
  - ◎ Similar modules expect or produce different input/output
- ◎ KalStub (used in hit adding) has recently been made more flexible
  - ◎ Previous version forced TrackMerge to be called after DchHitAdd
  - ◎ Previous version required special configuration for hit adders



# Proposed New Sequence

- ⊙ Helices Kalmanized by KalFit
  - ⊙ Steal (production) or copy (diagnostics) helices
  - ⊙ 1-Direction pre-fits to maximize efficiency
  - ⊙ Final full fits done by ‘combiners’ on output
- ⊙ Track Lists
  - ⊙ Default has Final Tracks
  - ⊙ XxxKalTracks are workspaces
- ⊙ ‘Combiner’ modules
  - ⊙ Input from XxxKalTracks list(s)
  - ⊙ ‘Merged’ tracks move to Default
  - ⊙ ‘Unmerged’ tracks stay behind
  - ⊙ Modules can be re-ordered without reconfiguring them
  - ⊙ New modules can be added
- ⊙ Final KalFit instances to finalize fits of Xxx only tracks
- ⊙ Minimal code changes



# Other Sequence Changes

- ◎ **Create a standard cosmic sequence**
  - ◎ Refit cosmics as a single track
- ◎ **Make Dch reco sequence more logical**