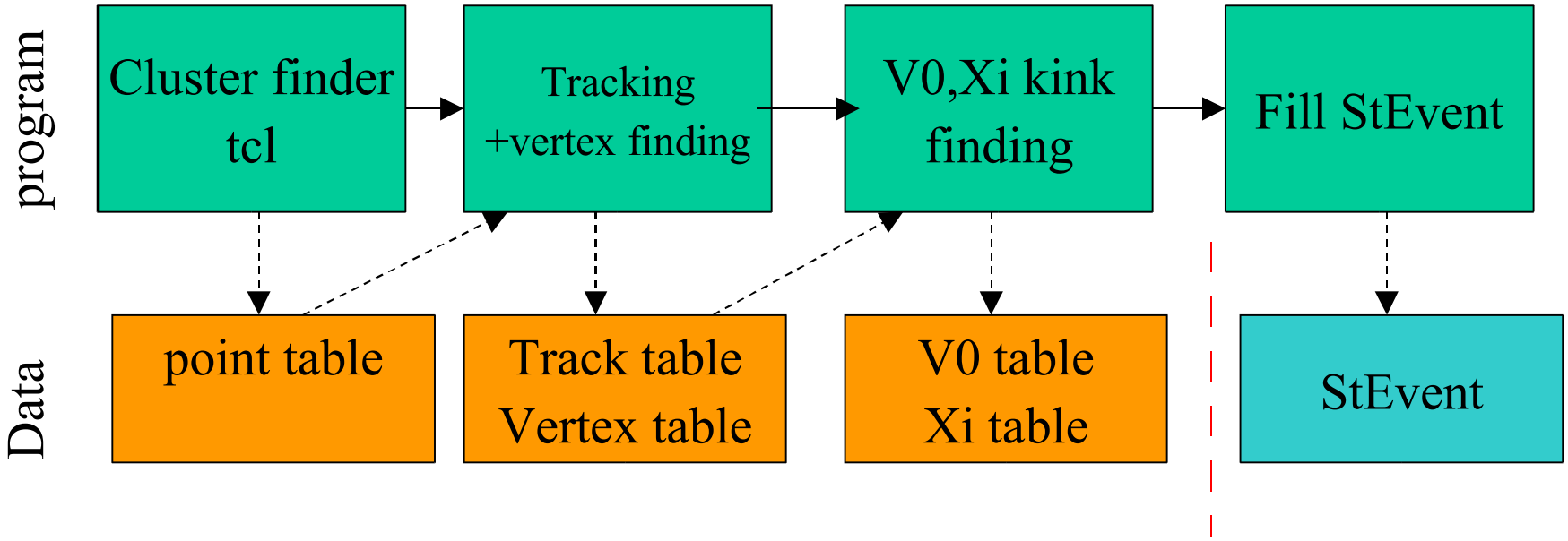
Secondary Vertex Finding Integration

Strangeness software for V0, Cascade and Kink finding needs replacing as it currently uses Tables!

Therefore we have to write and test new code *before* we can evaluate new tracker

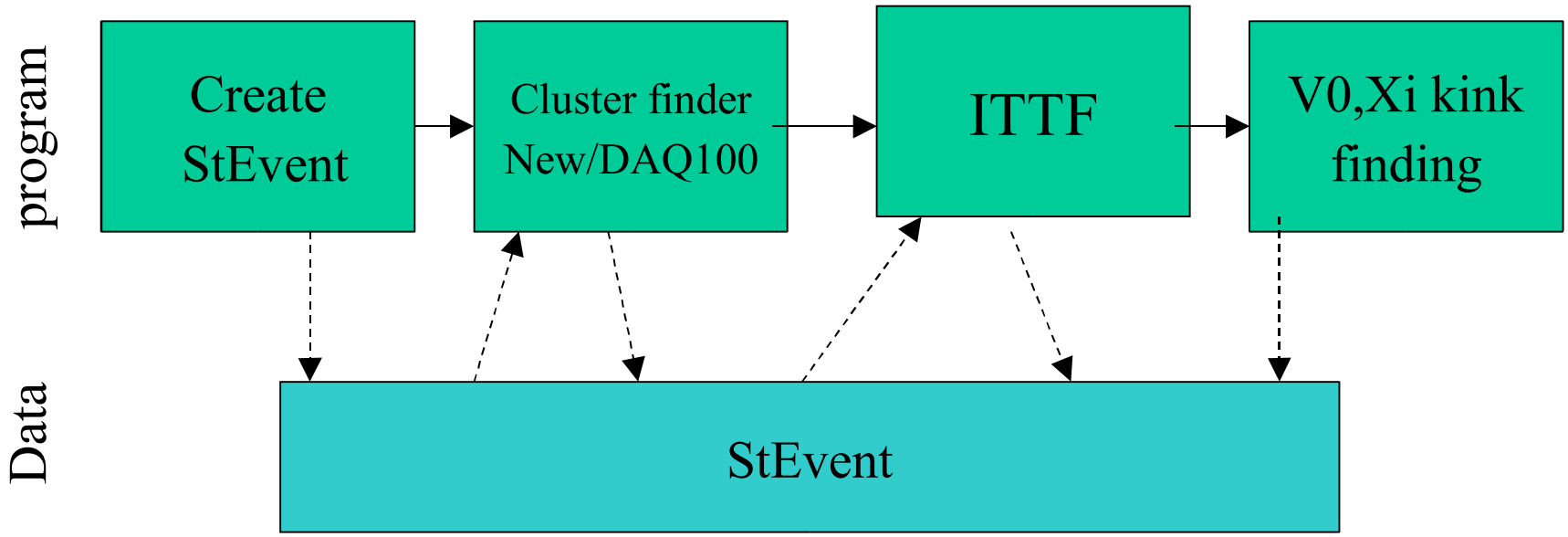
Chain comparison I

Current chain



Chain comparison II

New chain



Planned Evaluation(s)

1. Everything the same as old, except cluster finder

   Tests new cluster finder

2. Everything the same, except V0 (+Xi) finder

   1. Tests new V0 finder

3. ITTF, new V0 finder

   1. Tests ITTF (finally!)

Status/Plans

Gene Van Buren has written new maker,
StSecondaryVertexMaker

V0 and placeholder for Xi

Julien Faivre has new Xi finding code

Extensive testing going on, will then merge with Gene (see http://www.star.bnl.gov/protected/strange/faivre/utilities/xifinder.html)

Kink needs person but there is less to rewrite as
StKinkMaker is already in C++

Have not actually run on ITTF output yet

Some comments

What data do we test on, real/MC?

- Need several 100k real events to check effect on Xi

Why arent we using track extrapolation routines from *inside* ITTF?

- We could not test the new V0 code using old tracker, this can come later, if have good physics reasons

On average or candidate-by-candidate comparisons?

- Can do individual comparisons if we e.g. keep original + new V0s (for test2) or form V0s from both original and ITTF (test3),but separately, we dont want to make a V0 using a track from each.