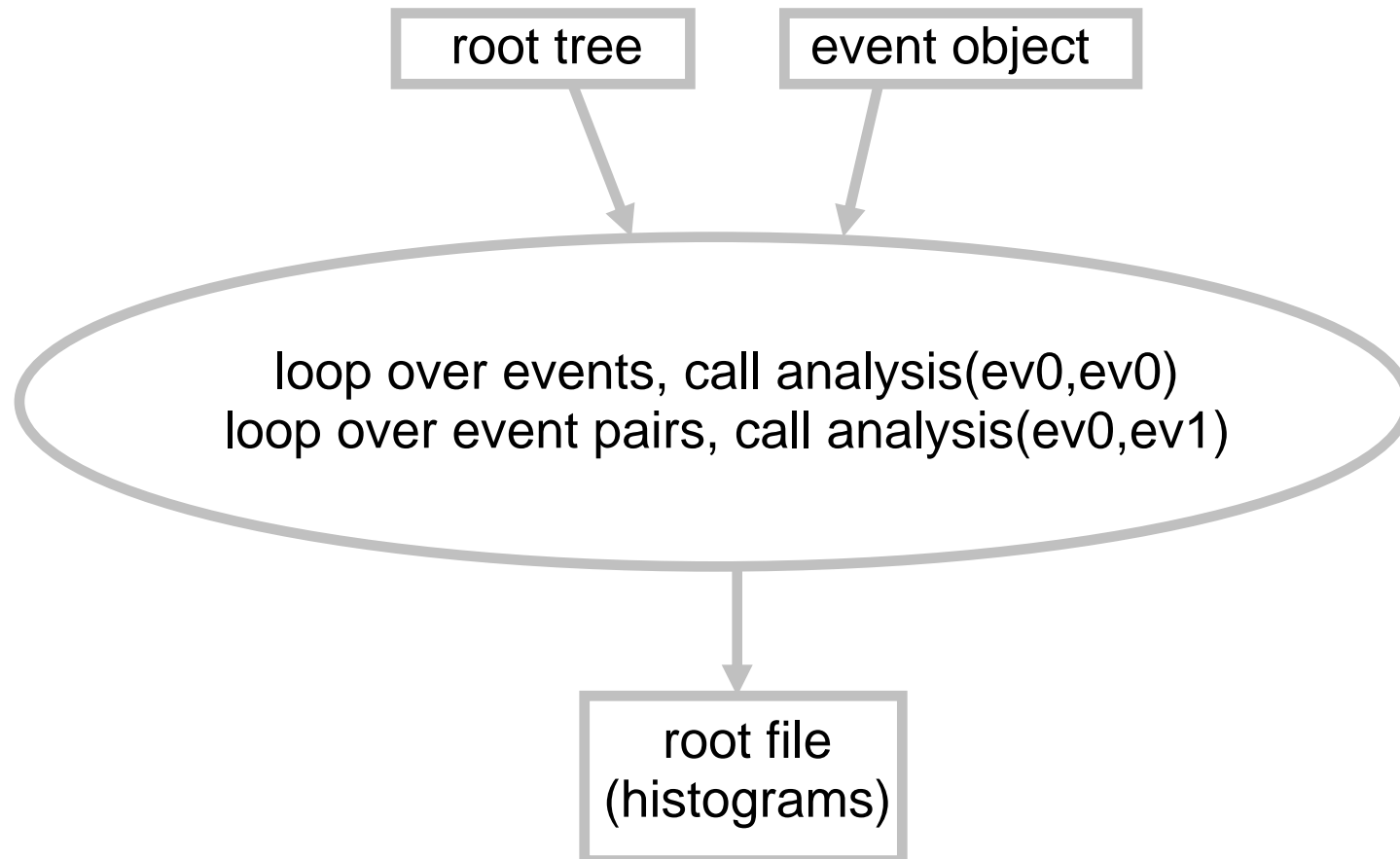


event mixing in UNICOR: basic scheme

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event mixing in UNICOR: closer look

- 🌐 clone the tree and the event → now we have tr0, tr1, ev0, ev1
 - 🌐 loop over events, classify them according to mult, z_{vertex} , Ψ_{RP}
 - typically 10x10x10 bins, but can be 1x1x1 bin
 - events know and tell their "centrality" 0..1

z_{vertex}	-1..1
Ψ_{RP}	$-\pi.. \pi$
 - result stored as simple arrays of event indices
- 🌐 loop over event classes (1-1000 of them)
- 🌐 for each class, loop over events, call analysis(ev0,ev0)
- 🌐 for each class, loop over event pairs, call analysis(ev0,ev1)

example of loops inside event class

(oral explanation with hand waving and pointing involved)

2 34 37 98 112 165 190 203 253 364 380 390...

UNICOR event mixing – pros and cons

- 🚫 runs for any root tree (Ceres, CBM, Alice ESD...)
- 🚫 operates on complete events (rather than buffering only some variables)
- 🚫 mixes only similar events
- 🚫 is simple (250 lines of code)

- 🚫 **not optimized for speed**
- 🚫 **needs to be edited every time I add a new analysis**
- 🚫 **was rejected by the offline → will not be part of the repository**