Hi Ricardo!
Sorry for the late reply

If you are still interested, the TimeHitSelectionMembrane selects the hit in the Mh to used based on difference in time between opposite PMTs.
The way I am using it is:
First I put the preprocesor as it was before. I use as reference the common trigger signal and I use it mainly to shift the scale of the time histograms. Then I use the HitSelection processor like this:

```
processor Lycca/HitSelectionStart  UTILS.TimeHitSelectionMembrane
      input_array[0:30] <-  Lycca/TofStartPreproc0.output[0:30]
      input_array[31] <-  Lycca/TofStartPreproc0.output[0]
      display all_diff
      display diff_visu | time_gate
      display hit_mult  20,0,20  in HitSelectionStart/multiplicity
      display output_array  in HitSelectionStart/output
      display input_array   in HitSelectionStart/input
end
```

The processor takes oppopsite PMTs and make all the possible differences between hits in each one of them. In the output all_diff you can see the difference of all the hits in one of them minus the first hit in the second. The output diff_visu, is an output of all the differences, where you can put a gate. This gate should ne around zero. The processor will then select as a valid time the two PMT combination the first hit that make a difference inside the gate.
There are still some precaution to take into account: I have been using this processor for some time, but is still a bit in a "experimental stage". In principle, the sum of the times should be a constant, but it didn't work for me and I still don't understand why. The fact that the difference is around zero means that the beam was around the center (I think), and then is still a good condition to apply.
You can play around with it a bit if you want, and see if you can improve your results. If you do, please also post it so we know that it is working for more people than me

Liliana