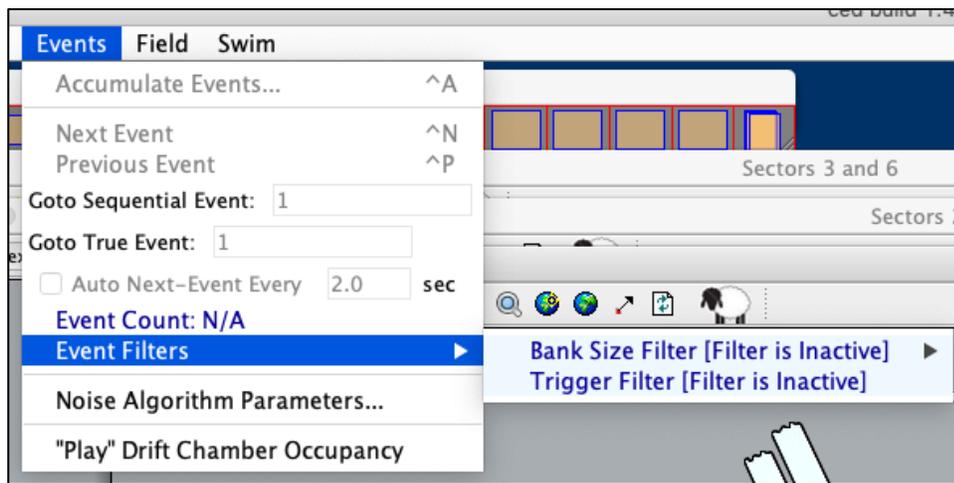


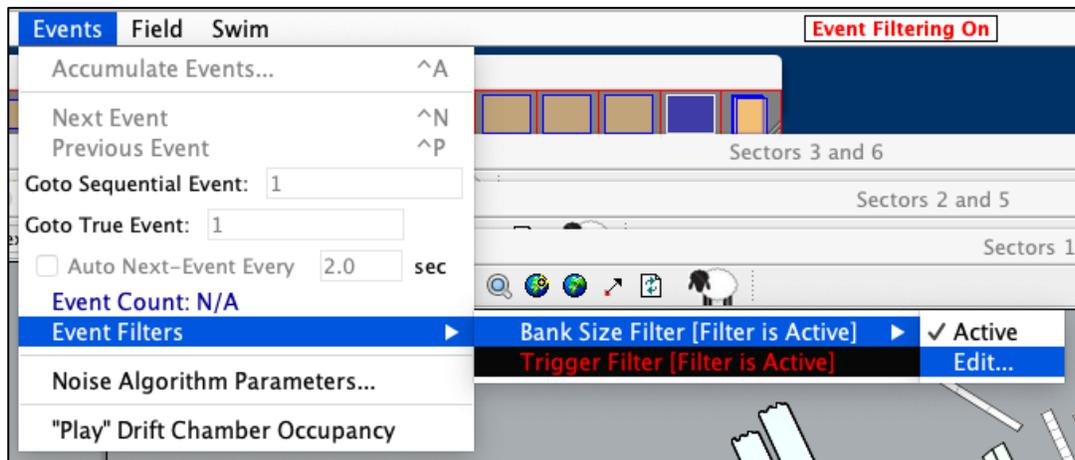
## Event Filtering in *ced*

*ced* has had the ability to use event filtering for some time. However, the only filtering implemented was on trigger bits. I didn't implement any other filters, because I lack the creativity to devise them. But recently I had a request to filter on bank size, where by bank size what is meant is the **number of rows in each column of the bank**.

With that requirement in mind, *ced* now (as of v1.4.70) has a "bank size" filter, which is accessible through the **Event Filters** submenu under the **Events** menu:



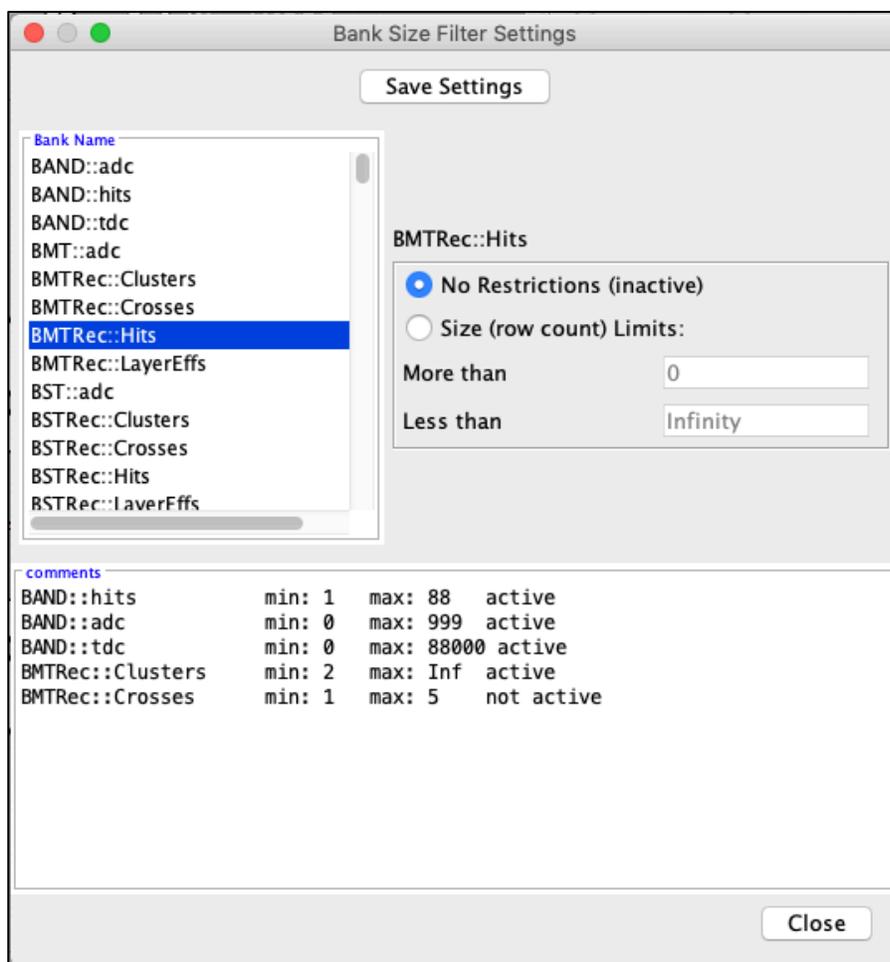
The original Trigger Filter is activated by clicking on that menu item. However, the Bank Size filter (and most likely the same for any future filters) is itself a submenu, with two menu items: **Activate** and **Edit...** (The preceding 4<sup>th</sup> period is the end of the preceding sentence. The previous three periods comprise the ellipsis from the menu item. Just to be clear.)



Which is activated (i.e. actually filtering) by selecting **Active**. You can have more than one (which by this point we mean two, since there are only two) filters active at a time. When any filter is active there is an indicator on the main menu bar, a kind of warning that you may be filtering out something important, like a pentaquark event.



From the submenu the Bank Size Filter can be edited. The editor is (hopefully) straightforward:



You select a bank, select the radio button for indicating that you want to impose limits, which sets that part of the filter to active, but it will not be applied unless the entire filter is active, as described above. So there are two levels of “active”.

The filter for a bank can be “deactivated” by clicking No Restrictions radio button, but it will remember its settings.

In the “less than” field you can enter any string that contains the letters “inf” (case insensitive) and it will interpret it as meaning infinity. Possible strings include “inf”, “InFiNITY”, “To infinity, and beyond”, and “dwdhuwkjdINF843rodnq”.

The text area at the bottom of the editor dialog provides a summary of the settings.

Finally, if you want your filter to persist (and who wouldn’t?) for the next time you log into *ced* (on that machine), well that’s what the “Save Settings” button is there for.

If you would like another filter in *ced*, let me know. We live to serve the CLAS12 community.