

Development of the hot channel algorithm

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[Establish the hot channel list]

Goal in this workshop: Establish the hot channel list specially for zero field run

My To-Do List

- Find a new fitting parameter with BCO cut to reduce the noise effect
- Modify the code to fit our software framework
- Compare the hot channel lists with Yuka(remote) and Joseph
 - Generally, Yuka and I have developed the hot channel algorithm with the same logic.
 - Joseph uses different logic to determine the hot channel. – We should compare to each other
- Check the stability of the hot channel to find the minimum required events to determine the hot channel
 - One of the easiest way to check the stability of channels is hit rates as a function of events(time).
 - If the variation of hit rates is not so huge, then next question is “how many events do we need to determine the hot channel list?”
 - Make a hot channel list with 1k events, 10k events.. Compare to hot channel lists with total events.

Prepare thesis topic presentation Nov. 10th