**Minutes of CGEM DAQ discussion**

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On February 14nd, 2025, we hold a dedicated meeting on CGEM DAQ. Based on the DC board issues encountered during CGEM DAQ debugging process and the limited time before physics data taking, we discussed the possibility and testing plan of using GUFI as a backup solution for CGEM DAQ.

Gg. reported the needs, constraints, and considerations for using GUFI as a backup solution for CGEM DAQ. After the discussion. We believe that the issues raised by Gg. have no fundamental problems, but some tests and preparation are needed. We agreed to use GUFI as a backup solution for CGEM DAQ and focus CGEM DAQ debugging on the GUFI system. The urgent testing for the first phase is as follows:

1. Test GUFI with fast control signals, including trigger, clock, check, and full, and make sure that CGEM can function properly with BESIII fast control signals.
2. Test the maximum trigger rate that CGEM can work stably. The designed maximum trigger rate of BESIII is 4kHz.
3. Conduct global cosmic-ray testing of BESIII DAQ and GUFI to check the synchronization of events.
4. Start preparing for offline checks for event synchronization.

Considering that the machine will be powered on before the end of February, all the above tests should be completed as soon as possible. Italy group is responsible of GUFI Software modification and maintenance, while IHEP group will prepare the hardware of the servers, data storage and transfer. To avoid shifters having to configure and control GUFI manually, after the above tests, we will develop an interface between the BESIII DAQ and GUFI.

Wolfgang suggested using the simulated triggers of BESIII detector for testing. He also suggested that the related hardware people from Italy group should come to IHEP for testing. Gg. mentioned that Angelo will go to IHEP next week.