Minutes of PITZ Physics Seminar, 03.02.2022

Project: PITZ

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Agenda:

- 1) AOB
- 2) Teaching by G. Vashchenko: DAQ browser, shutdown tool, iLILI

Results:

- 1) AOB
 - a. HQ: News from the vacuum leak tests? TW: Unfortunately, not, there was an RGA measurement started, but could not be finished (for personal reasons). Will be done again on Friday. Frieder saw the rise in vacuum levels, he was thinking it was outgassing. Perhaps firing of Ti-pumps might be done.
 - b. HQ: After this weeks RC some vales were closed: TW: Yeah, Low.V1 and Cath.V3 were closed, to see if there is leakage on the other sides of this valves to see if leaks are beyond this area, and the gas is moving into the gun are.
 - c. FS: Shutdowns are supposed to be taken seriously. Work has to be done.
 - d. MG: The cable pulling company requested 1-2 more days to pull cable, as the tracking was inaccurate. They could work during the morning shift, and condition during late and night shift. FS: That is an external company.
 - e. HQ: Does the late shift then have to secure the 2nd tunnel? TW: Second tunnel will not be searched, but they are not allowed to work there. FS: Did they finished sharply at 3 pm? MG: Yes, so far.
 - f. FS: Chris, since you are on late shift with Mikhail, remind him to check to make sure no external companies are in the second tunnel.
 - g. GV: Feedback on check on external electrical devices from the control room? AH: There were some stickers, so things were probably checked.
 - h. GV: Another issue on Interlock Bit History of GUN: Some interlocks are several rapid interlocks, so they will be counted unexpectedly.
- 2) Teaching
 - a. FS: Do I have to use the Asterix? GV: No
 - b. HQ: When typing rf coupler, you get many, what is the difference? For historical reasons they exist. HQ: But which one is the correct? GV: This is something you have to know.
 - c. HQ: The properties with the time stamp are the new ones? GV: Yes, these are new.
 - d. FS: But legends are missing. GV: I will add the legends, when keeping plots in figure (for printing)

- e. FS: Can you still update the refresh rate for the GUI's? GV: For spectra this is possible. FS: What about vacuum events?
- f. FS: Difference between Gun and RF2 Interlock? GV: Gun is gun, and rf2 is rf2 klystron. They don't always turn off simultaneously, for different IL logic reasons.
- g. FS: This is done in certain groups: PMT signal are not grouped with power levels. GV: There is only one group: All PMT's and e-detectors. So, everything but power levels. If there is demand, I can add this.
- h. FS: Will the software always display the latest and largest levels? GV: Yes.
- i. PB: Can you explain what the pulse length means in the summary table? GV: It is the pulse length, in the same logic as in the rf2 info server, so you only consider the data within the margins. The left and right margin, and the pulse level are read-out from the DAQ and then calculated and plotted.
- j. PB: Pulse length comes from DAQ? GV: No, the margins etc. are used from the DAQ, the pulse length calculation is done in MATLAB.
- k. PB: How are several spikes treated? GV: The software considers all simultaneously for the calculations.
- 1. FS: I think this proposal is useful, otherwise we won't see why the pulse was interrupted
- m. FS: So, you get one column per line plotted in the summary table? GV: Yes.

Protocol prepared by Raffael Niemczyk, 03.02.2022 (Name, Date)