

Starting up of pixelized Micromegas detectors during 2021 data taking

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PixelMM detectors preparation



Status before the run

- No intervention during 2019-2020, same status as 2018
- 2020 dry run: no problem seen in APV readout (only stations 1 and 2 powered up)
- No (known) update on ADC card firmware

2021 run preparation

- Missing power supplies reinstalled (thanks to Stefano)
 - 1 LV Wiener from pool
 - 1 HV SY5527 crate and 4 A1821N from pool
- LV powered on end of June, no readout problem
- HV powered on beginning of July, no immediate instability
- In August: latency tuned, amplitude calibration produced

Pixel MM during the run



APV readout

- Several fuses were too limited on transition cards (powering APVs), replaced by 7A ones
- A few APVs (MP03MU in particular) loose their configuration from time to time, recovering by reload
- One APV was not responding on MP01U → replaced

HV status

- Several problems with some A1821N modules, with wrong large current readout and trip generation on some channels. 3 channels not used anymore by grouping all drift electrodes of station 3 to one channel + splitter box
- Could be fixed by replacing the faulty modules, availability at pool to be checked
- A few instabilities reported on MP03V mesh HV