NP04 PDS data taking planning 22/02/2024

Run plan an others

A. Cervera IFIC-Valencia





Various things

CERN in the first tab. Tasks will be distributed soon.

https://docs.google.com/spreadsheets/d/ 14fpCjNZFnyq72wugfSGXdAcTrgFroA1Al2In7VeyZIY/edit?usp=sharing

- Documentation: some documentation, mainly about DAPHNE (including) expert training) added. Also channel mapping
- Calibration trigger: report from Carlos/Manuel in this meeting
- IV curves: report from Federico/Renan in this meeting
- Shifts: waiting for overall NP04 run coordinator appointment to understand general NP04 vs PDS-only shifts



Link to the NP04 PDS data taking docs. Please indicate your presence at







PDS expert training

- Last week several people attended the PDS expert training at CERN
 - Focused on DAPHNE access and control
 - IV curves
 - Spy buffer access
 - Firmware uploading
 - Start looking at integration with DAQ
- We started writing some documentation, which is available here (also through main spreadsheet)
- Sufficient info to start developing online monitoring tools
- More training needed to become "pseudo-experts"



FEBRUARY
1 2 3 4 5 6 7
People at CERN
Name Institution
Manuel Arroyave FNAL
Renan de Aguilar UNICAMP
Alessandro Minotti MiB
Anna Scanu MiB
Federico Galizzi MiB
Jacob Boza CSU
Fatma Boran Indiana Uni.
Anselmo Cervera IFIC
José Soto IFIC
Anna Balboni Ferrara





Slow controls

Currently available through DCS: power control for DAPHNE and calibration module

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and Xavier



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 No hardware interlock for purity monitors (PrMs) possible at this moment, instead a button indicating powered SiPMs will be added to the DAPHNE power control panel. Current PDS expert should manually take care of this button, which will prevent PrM operation. Ongoing discussions with Jianming







Slow controls II

- Not possible at this point to monitor through DCS additional quantities:
 - SiPM bias voltage and current
 - DAPHNE temperatures
 - DAPHNE-DAQ syncronisation
- This will be done through online monitoring using DAPHNE spy buffers
 - Scripts available (Manuel)
 - Working on a user friendly interface





Run plan

- Please have a look. Comments, suggestions welcomed (comment permission for everybody). We can further discuss it next week
- A summary with the relevant information will be sent tomorrow to DAQ group. Thus, early comments (tomorrow) welcomed

	Fe	February			March			Ap	ril			May	/	June				
		purging		cool filling			, ,				rificat	tion		regular operation				
Study	trigger																	
IV curves and Vbd	none			d	d	d	d	d	d									
DCR	TI			d	d	d	d	d	d									
Light yield vs pur.	self									d	d	d	d					
Gain calibration	TI													W	W	W	W	W
Self-trigger efficiency	TI+self																	
Light yield map with laser	self											?			?			
Physics	self																	

d=daily, w=weekly, TI=Timing interface command



Preliminary run plan available with description of the different configurations

- https://docs.google.com/document/d/1mQsr1uxxwAuwMQ7lffBRHQ15HBT72zaVZ70qr7zIAzQ/edit?usp=sharing
 - (credits: M. Arroyave, D. Christian, F. Terranova, D.Warner, A. Minotti, A. Cervera)



