

# Status Setup CACTUS Milano\_Bicocca

CACTUS@MILANO \_BICOCCA

DUNE Photosensor WG Meeting (DUNE-SP-PDS)

July 25, 2023

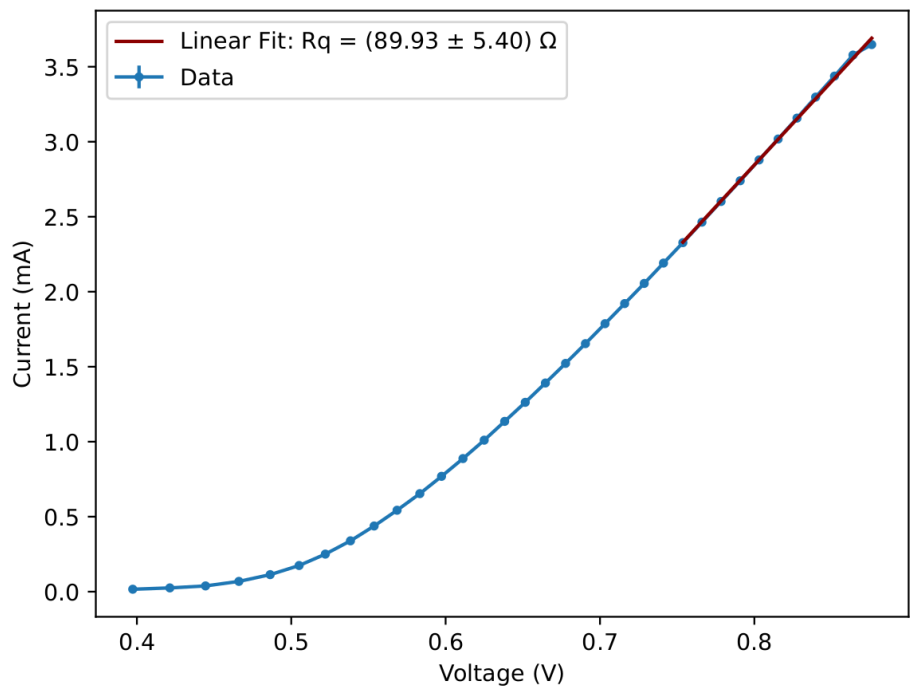


- We started commissioning:
  - The calibration of the system was carried out with the Ferrara group.
  - The cables and the position of the electronics was reorganized.
  - Reducing possible sources of light and ground connections in the electronics to improve the results of the IV curve.

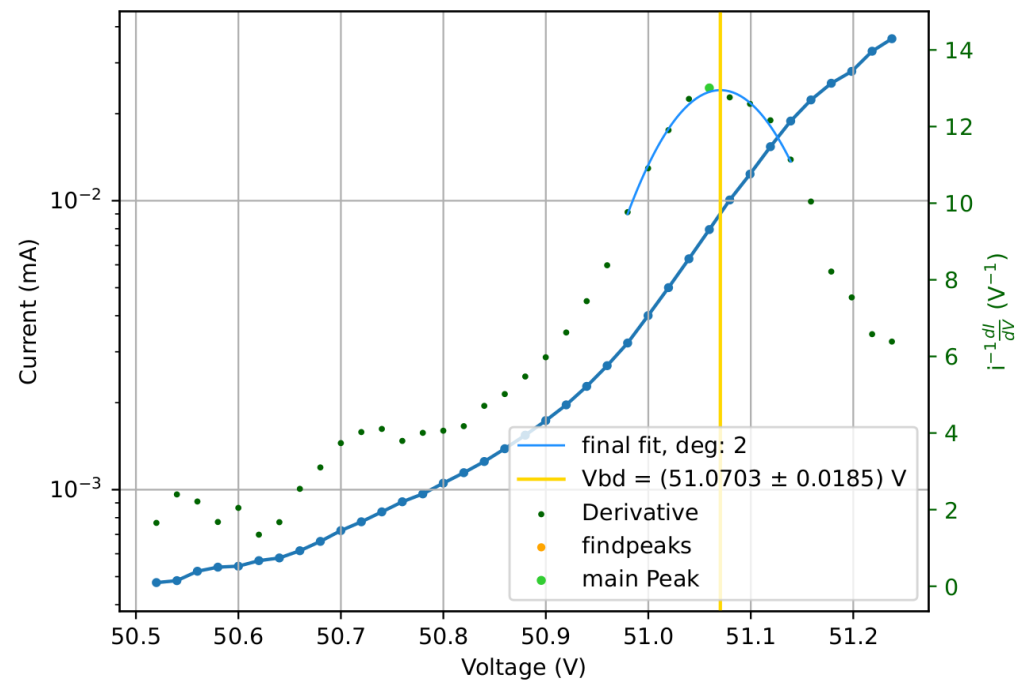


- Room Temperature: (Preliminary)

Forward IV curve of ARDUINO 2, SiPM 1

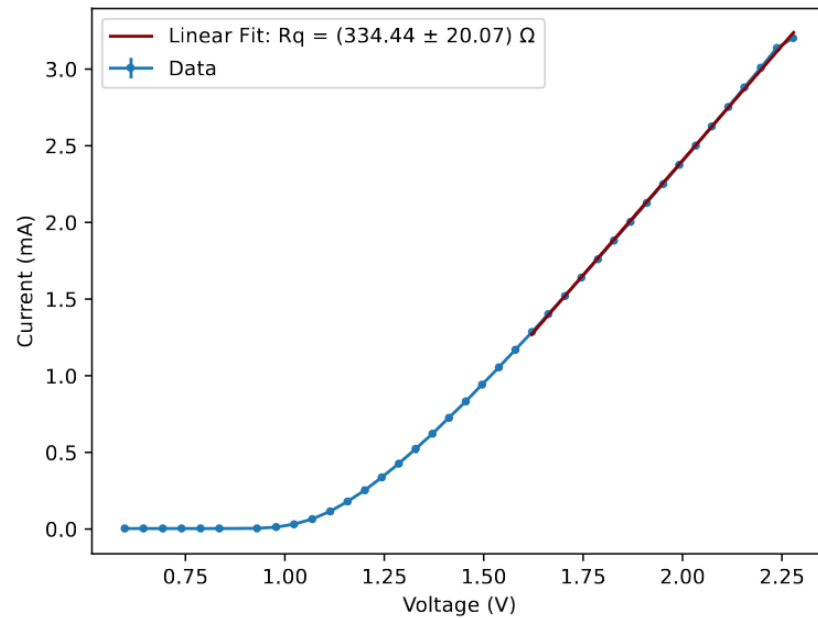


Reverse IV curve of ARDUINO 2, SiPM 1

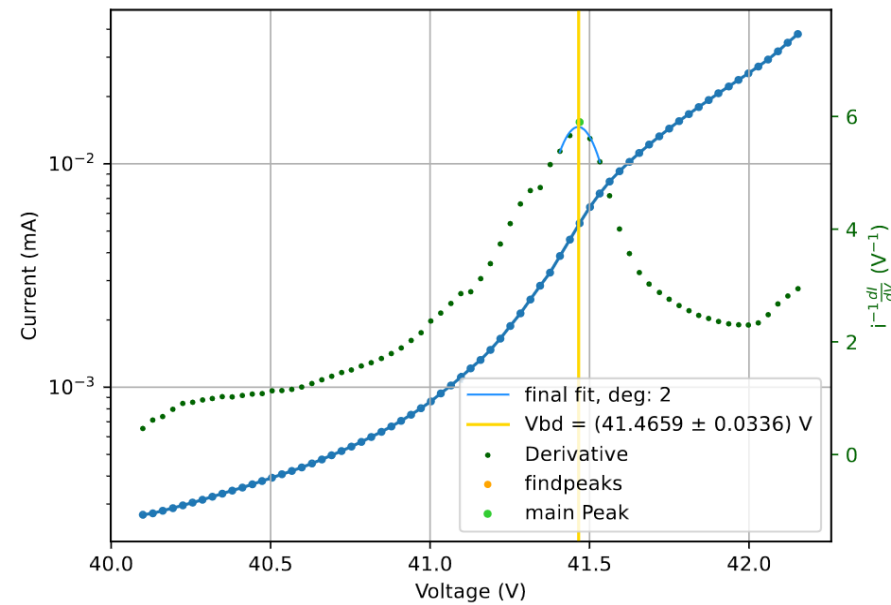


- LN2 Temperature: (Preliminary)

Forward IV curve of ARDUINO 0, SiPM 19



Reverse IV curve of ARDUINO 0, SiPM 19



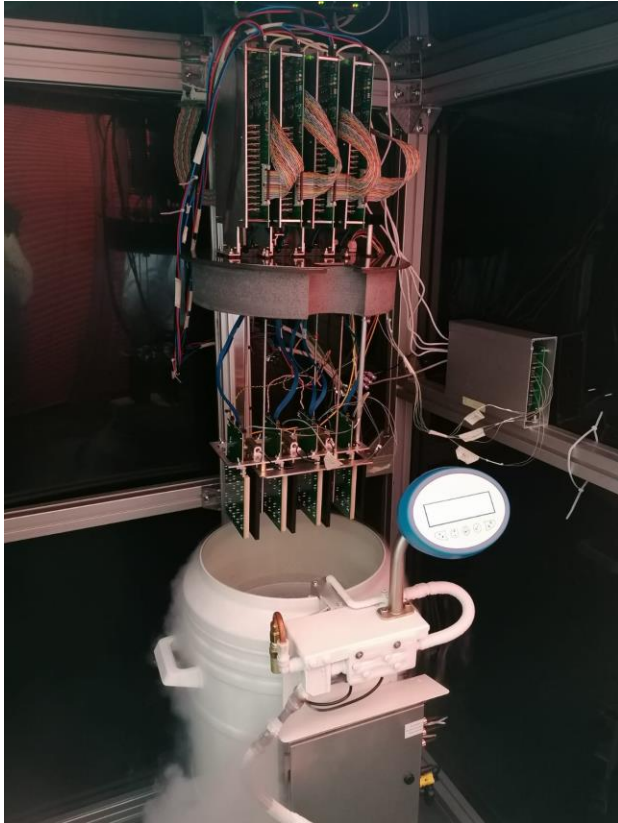
- DCR: (Preliminary)

Mon Jul 24 15:00:00 2023	ARDU [0-3]	SiPM [0-29]	ARRAY ID	SiPM position [0-5]	Counts
0	7	002403	1	460	
0	6	002403	0	129	
0	5	002402	5	603	
0	4	002402	4	68	
0	3	002402	3	774	
0	2	002402	2	375	
0	1	002402	1	1168	
0	0	002402	0	10544	
0	24	002406	0	469	
0	25	002406	1	613	
0	26	002406	2	939	
0	27	002406	3	683	
0	28	002406	4	41	
0	29	002406	5	107	
0	18	002405	0	134	
0	19	002405	1	701	
0	14	002404	2	557	
0	13	002404	1	294	
0	12	002404	0	108	
0	11	002403	5	52	
0	10	002403	4	496	
0	9	002403	3	202	
0	8	002403	2	465	
0	20	002405	2	168	
0	21	002405	3	54	



Mon Jul 24 15:44:58 2023	ARDU [0-3]	SiPM [0-29]	ARRAY ID	SiPM position [0-5]	Counts
0	7	002403	1	0	
0	6	002403	0	0	
0	5	002402	5	0	
0	4	002402	4	0	
0	3	002402	3	0	
0	2	002402	2	0	
0	1	002402	1	0	
0	0	002402	0	10529	
0	24	002406	0	0	
0	25	002406	1	0	
0	26	002406	2	0	
0	27	002406	3	0	
0	28	002406	4	0	
0	29	002406	5	0	
0	18	002405	0	0	
0	19	002405	1	0	
0	14	002404	2	0	
0	13	002404	1	0	
0	12	002404	0	0	
0	11	002403	5	0	
0	10	002403	4	0	
0	9	002403	3	0	
0	8	002403	2	0	
0	20	002405	2	0	
0	21	002405	3	0	
0	22	002405	4	0	

- Apparently there is a noisy channel, we verified by applying a zero voltage.
- Today it was checked and the channel works fine, apparently it was a condensation problem.



- We are still waiting for Barcode reader (delayed).
- We will start the tests on the 1st week of September

Delivery	Rx Box #	Box #	Trays
2	9	9	1-24