# DESY Test beam

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#### Overview

- Finished 8 days test beam in DESY
- Electrons beam (5 GeV)
- The two sensors from IHEP were successfully operated and tested at the very beginning of the test beam
  - Two un-irradiated sensors
  - At room temperature
  - Will send them back to IHEP with Jin next week

## List of tested sensors

## **FBK**

Sensor	Channels	<b>Board Type</b>	Irrad	Annealing	Voltage steps	Plans	Date tests should be run:
FBK UFSD3 W5 (B+C) 2x2	1	UCSC	3e15n		700!!,650!,600,550,500	time, cold	17.05 - Done
FBK UFSD3 W5 (B+C) 2x2	1	UCSC	1.5e15n		550, 500, 450, 400, 350	time, cold	17.05 - Done

#### **IHEP**

1	NDL BV60 unirrad	1	UCSC	no	90, 70, 50	time, room (-90V) and cold (-60V)	15.05 - Done	•
1	NDL BV170 unirrad	1	UCSC	no	130, 90, 50	time, room (-145V) and cold (-120V)	15.05 - Done	•

#### **HPK**

HPK 3.2 SE3 (high gain)	1	UCSC	1.5e15n	650!, 600, 550,500	time, cold	18.05 - Done
HPK 3.2 SE3 (high gain)	1	UCSC	3e15n	700!!,650!,600,570,550	time, cold	18.05 - Done
HPK 3.2 SE5	1	UCSC	1.5e15n		time, cold	If there is time

## **CNM**

CNM 10924 W6S1020	1	UCSC	1e15p	530!!, 480, 440	time, cold	16.05 - Done
CNM 10478 W5S1115	1	UCSC	1e15p	680!!, 660, 560	time, cold	16.05 - Done
CNM 10478 W4S1099	1	UCSC	1e15p	520	time, cold	19.05 - Running
CNM 10478 W4LG07	1	UCSC	3e15p	610, 550	time, cold	18.05 - Done
CNM 10924 W6S1006	1	UCSC	3e15n	740, 720, 700, 680, 660, 640, 460	time, cold	19.05 - Done

### IHEP sensors



- Operation temperature: 20°C
- Operation Voltages:
  - NDLBV170: 50, 90 130V (started showing auto triggering at 150)
  - NDLBV60: 50, 70, 90V

## General informations

 Detailed informations about all the runs for at the full list of sensors can be found here:

https://docs.google.com/spreadsheets/d/19wAAz2TZdayF\_LWKn0-crHXcIbfLRYChQpdAgFXxU5Y/edit#gid=1556342074

- List of sensors with their irradiation info can be found here: <a href="https://docs.google.com/spreadsheets/d/19wAAz2TZdayFLWKn0-crHXcIbfLRYChQpdAgFXxU5Y/edit#gid=1309702600">https://docs.google.com/spreadsheets/d/19wAAz2TZdayFLWKn0-crHXcIbfLRYChQpdAgFXxU5Y/edit#gid=1309702600</a>
- The I-V measurements of the sensors including IHEP are here: <a href="https://docs.google.com/spreadsheets/d/19wAAz2TZdayF\_LWKn0-crHXcIbfLRYChQpdAgFXxU5Y/edit#gid=986207540">https://docs.google.com/spreadsheets/d/19wAAz2TZdayF\_LWKn0-crHXcIbfLRYChQpdAgFXxU5Y/edit#gid=986207540</a>
- Data stored directly on eos (will be processed by Nikola Makovec for the analysis)