

# EasyPET



## Group #3

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IEEE school in Cape Town 2018

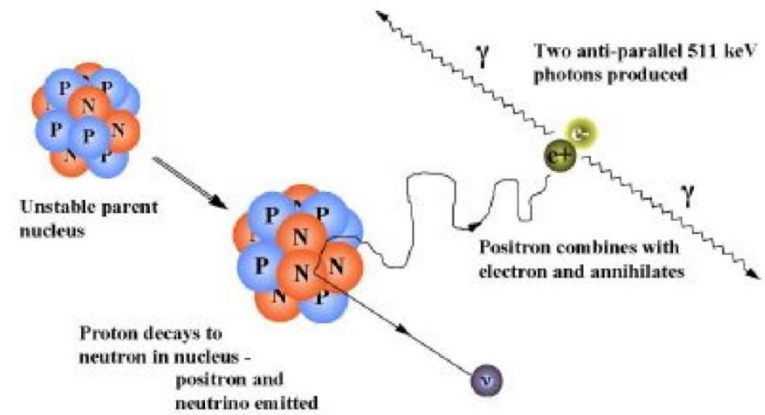
# INTRODUCTION

## Easy Positron Emission Tomography (easyPET)

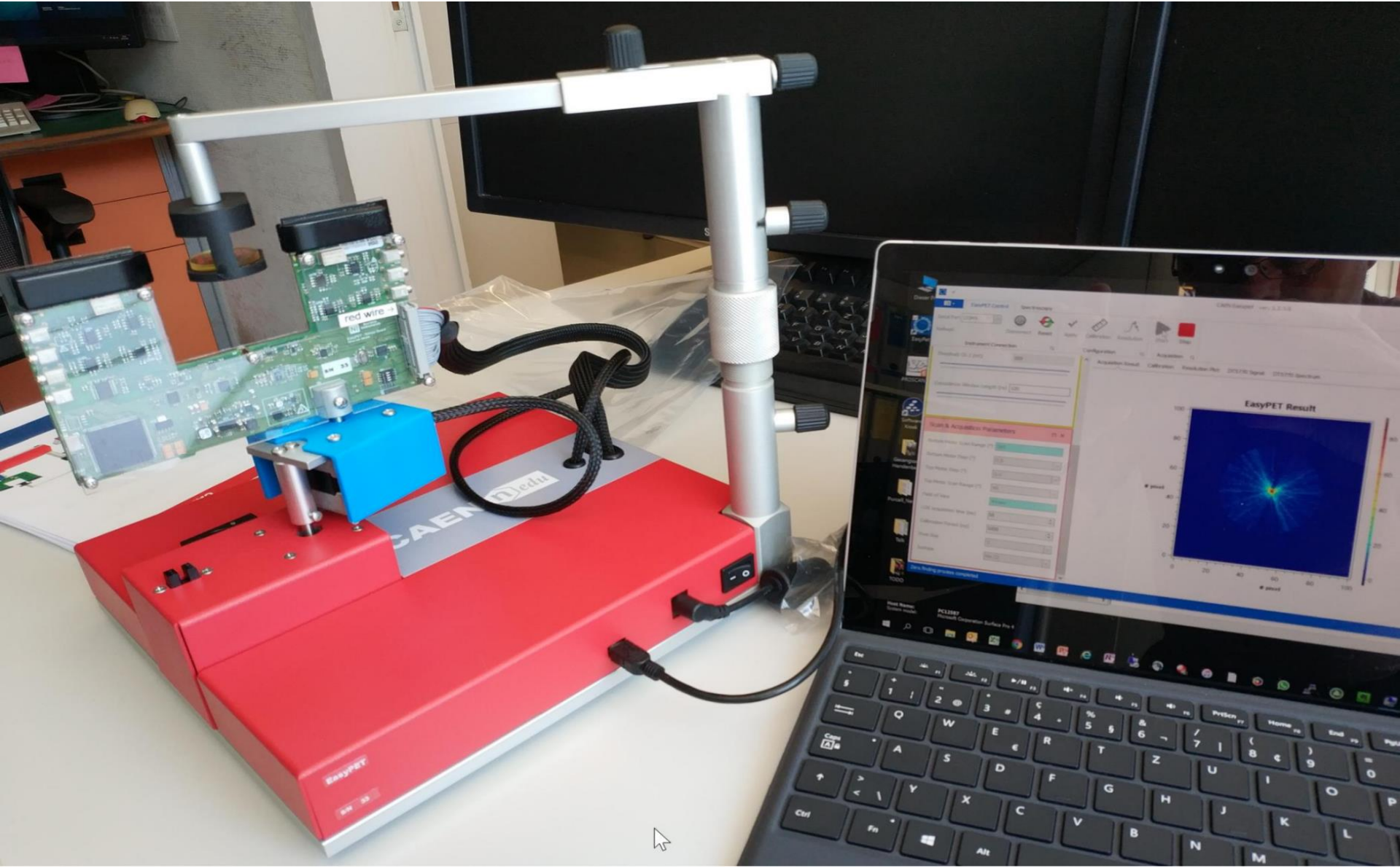
- is a medical radio imaging technique.

- ❑ This technique is based on a single pair of collinear detectors, arranged to identify the position of a  $\beta^+$  decay source.
- ❑ The easyPET technique is solely used for imaging functional and physiological processes inside living bodies.

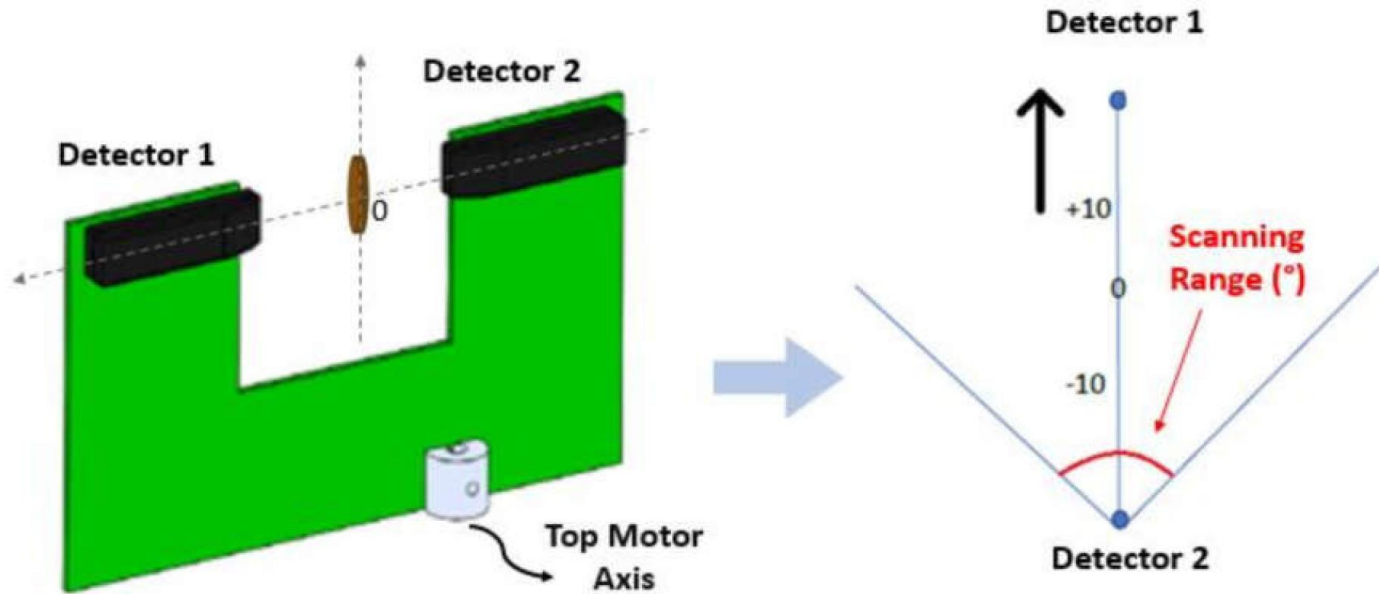
:- cancer diagnostics, monitoring of therapy effects etc.



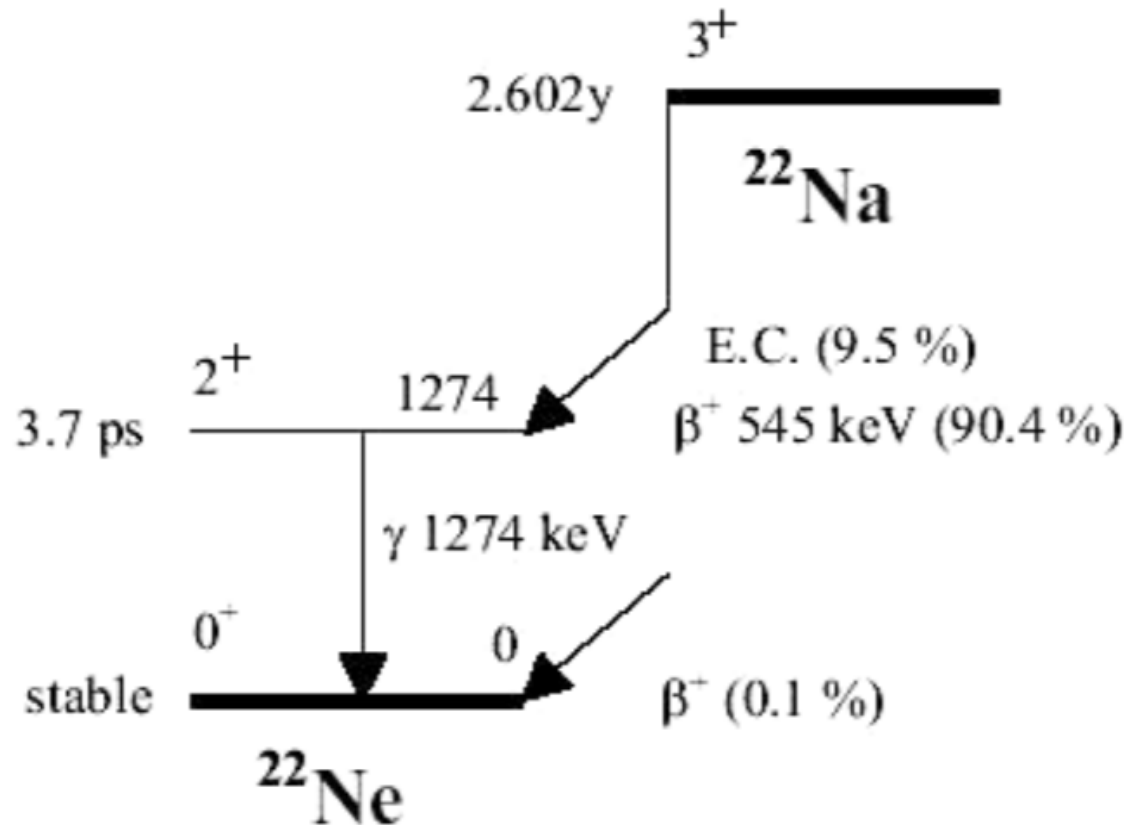
# Exp. SETUP



# Exp. SETUP CONT...

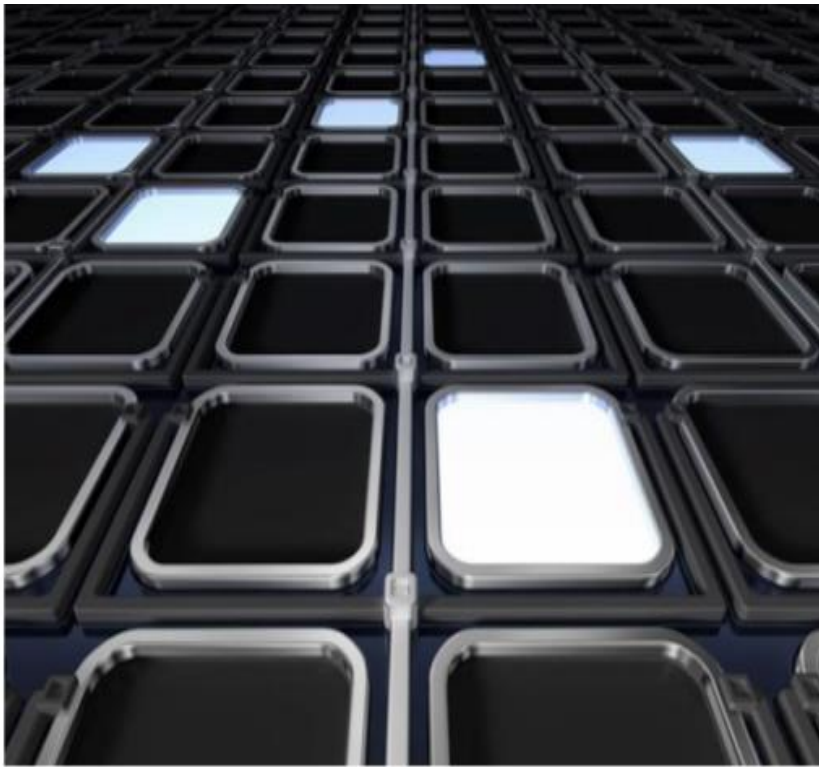


# Exp. SETUP CONT...

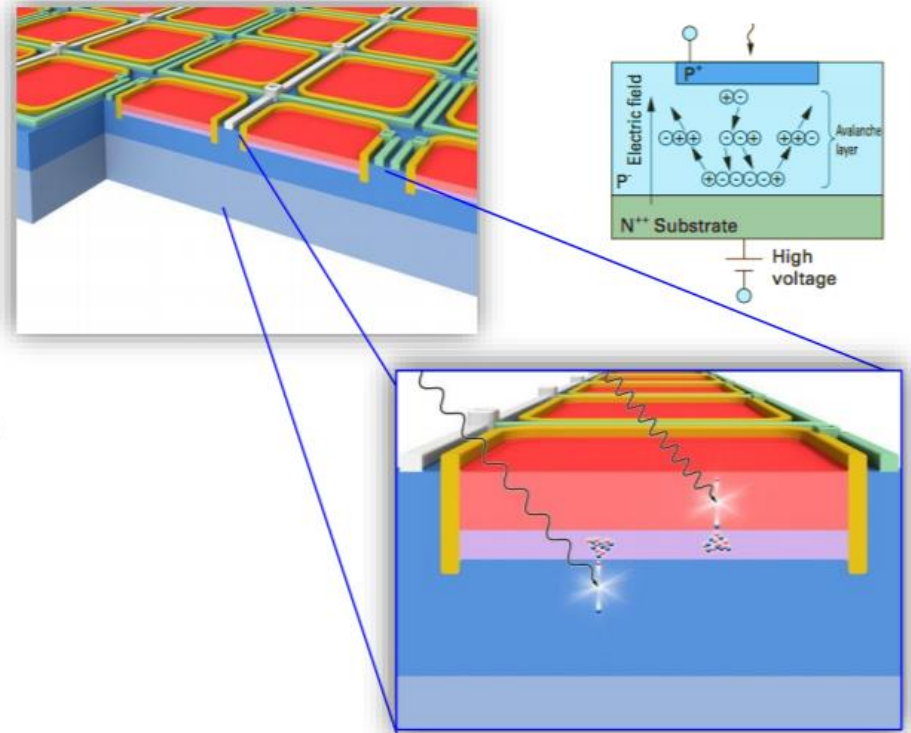


# Exp. SETUP CONT...

## SiPM



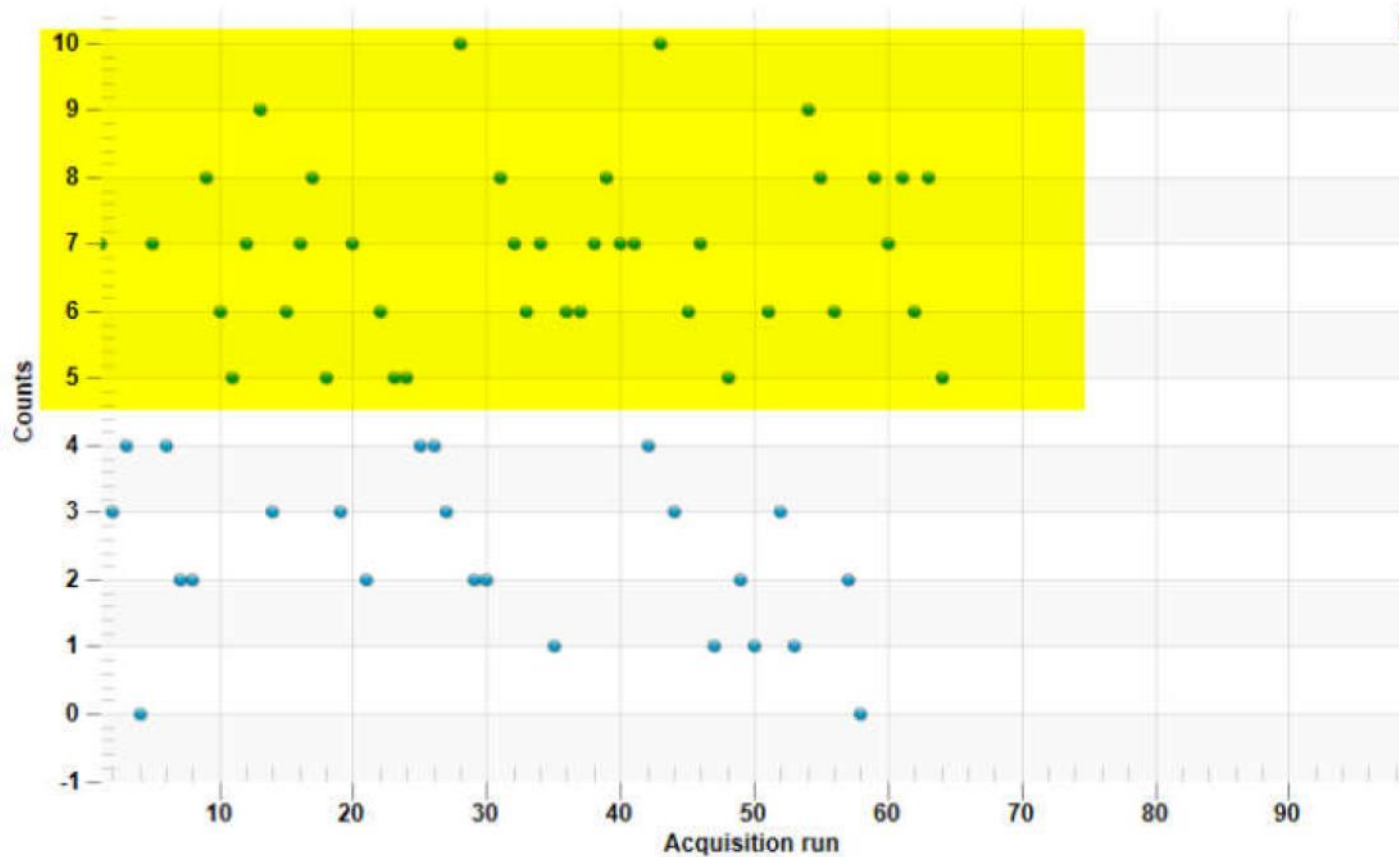
## Detection Mech.



# Exp. SETUP CONT...

Clear Plot

### Calibration Counts



Status RUNNING.

Top Angle 0

Bottom Angle 0

Counts 5

Total Counts 28

Run Time 84.6 s

Acq Length 0 s

DT5770 MCA

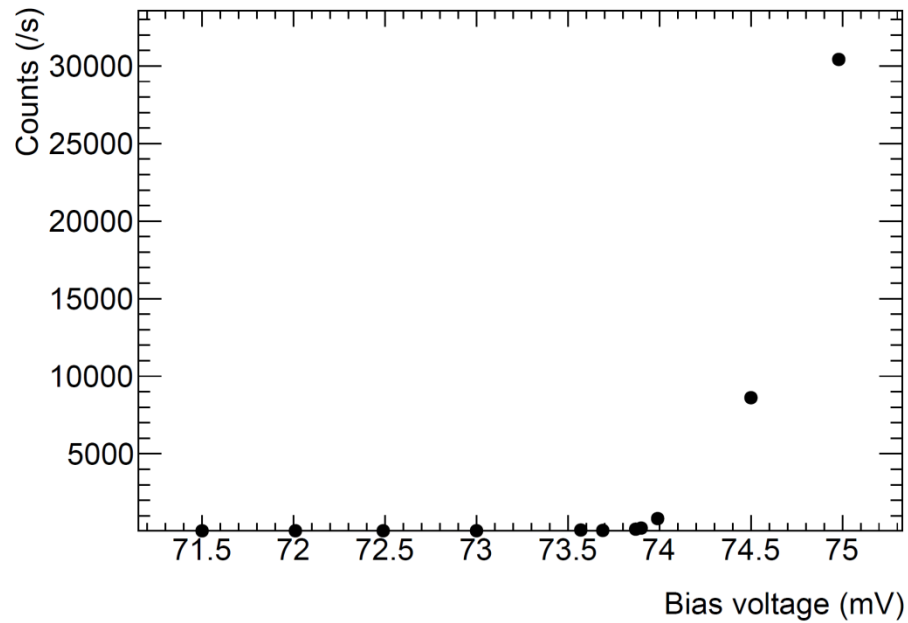
Status READY

Input Count Rate 6

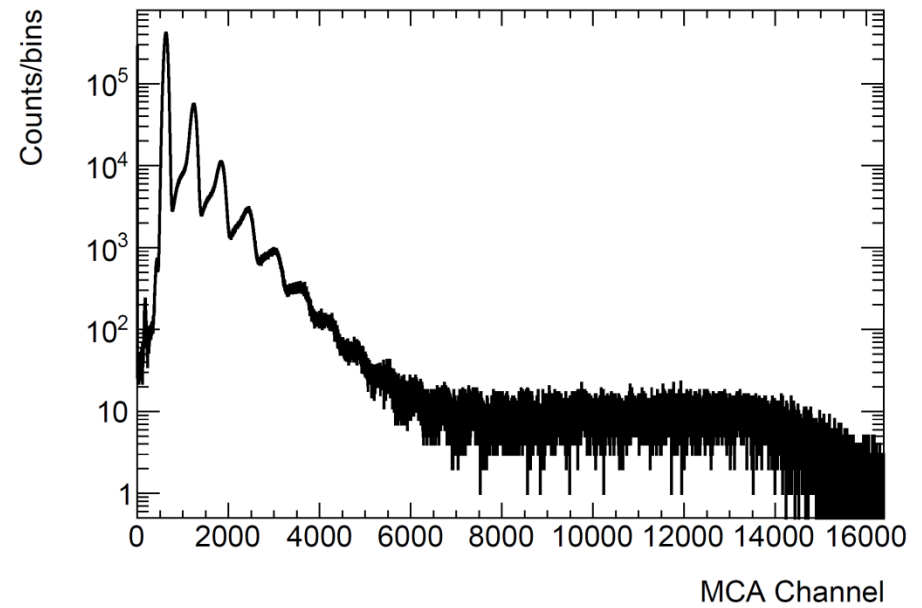
Output Count Rate 6

# RESULTS

## SIPM Characteristics



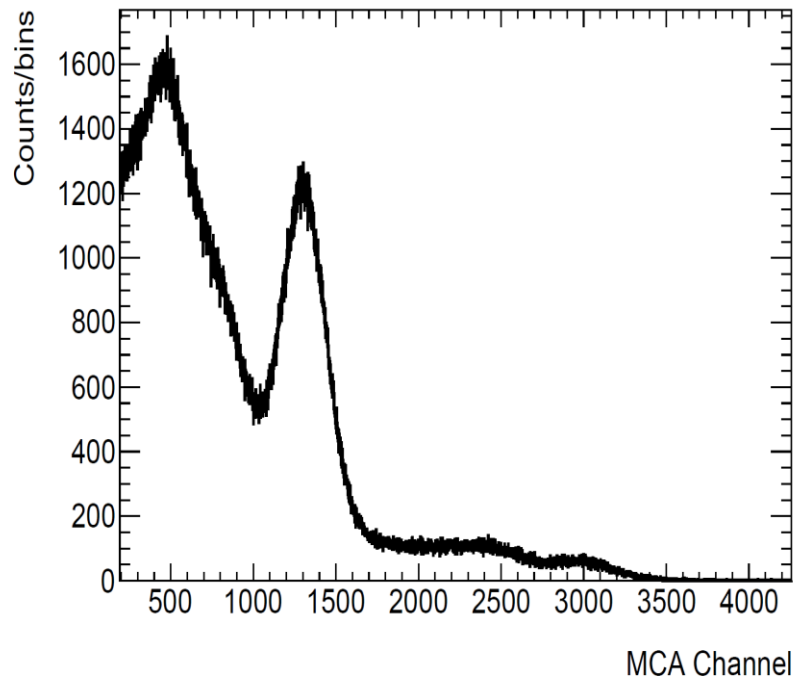
## Multiple Pulses





# RESULTS CONT...

## Gamma Spectrum



## Spatial Resolution of Na<sup>22</sup>

