# Fundamentals of PET Research using EasyPET









## Meet Our Team







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### Presentation Outline





#### Background of EasyPET

The main idea behind EasyPET, how it works and the value it adds to PET Research





#### Motivation for EasyPET

Why EasyPET? What makes it special and why is it Relevant?

#### **Experiments using EasyPET**

Demonstration of Experiment using EasyPet





#### Results and Discussion

Discussion of results obtained from **Experimental Setup** 

Summary and Conclusion **288** 









### Background of EasyPET

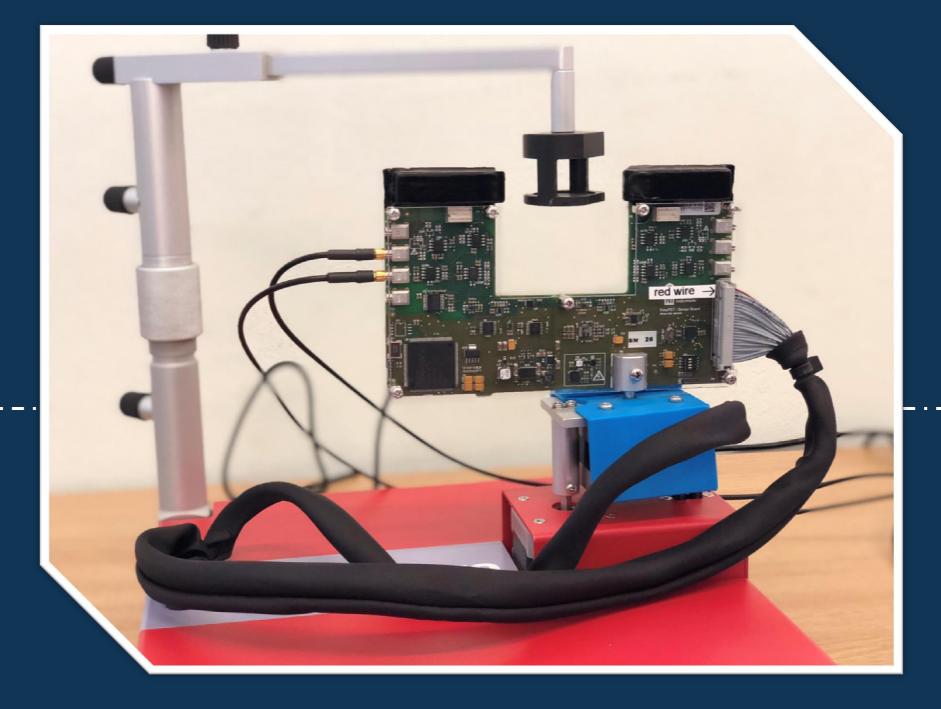
EasyPET is a simple and affordable small dimension Positron Emission
 Tomography (PET) scanner

Target is high level education for physics, engineering and nuclear

medicine students

• EasyPET has simple architecture

Quick prototyping







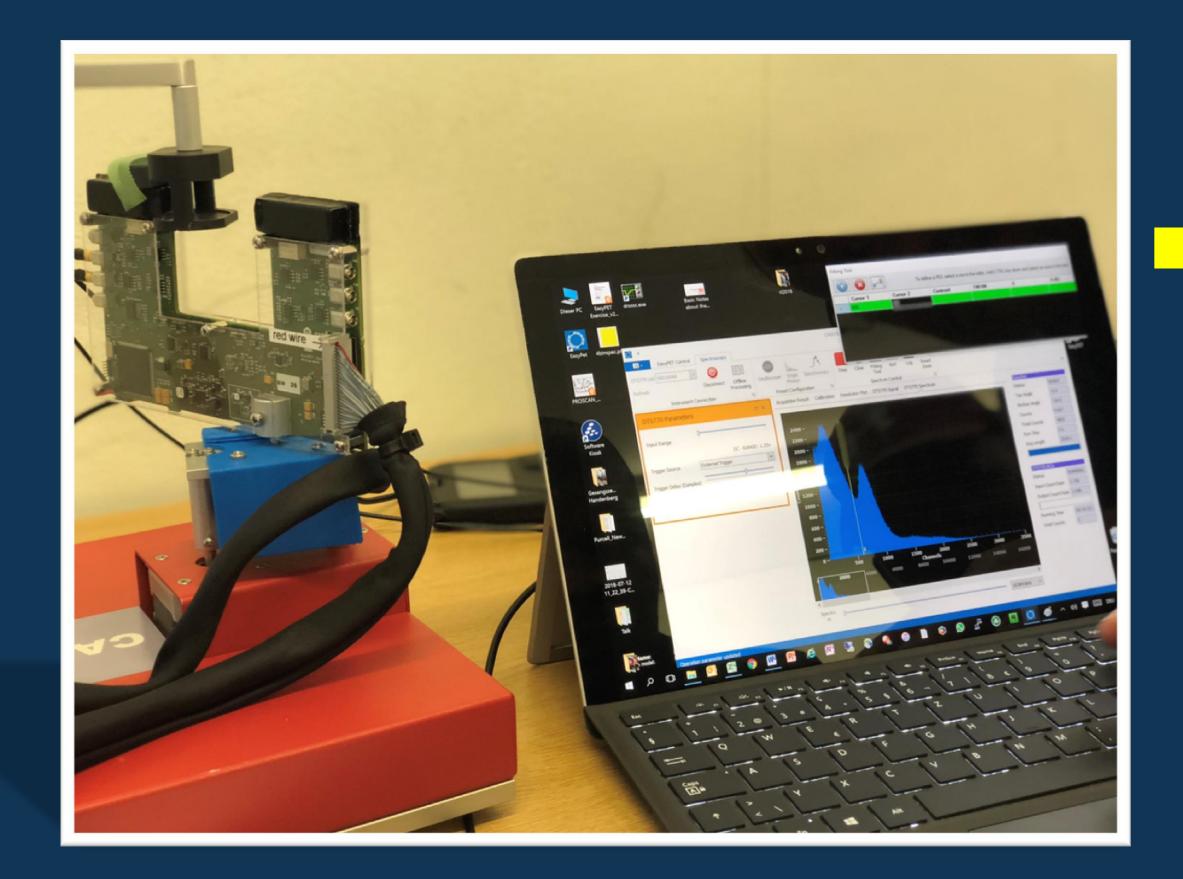
### Motivation for EasyPET



- EasyPET is affordable
- EasyPET is financially viable
- EasyPET can be used everywhere with Laptop and Setup
- Easy to understand
- PET Education is necessary for all

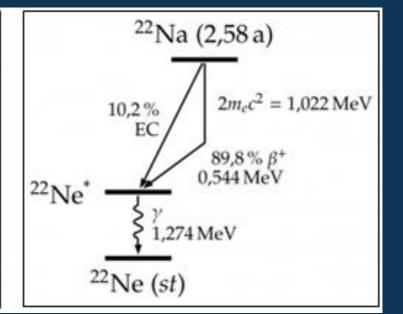


#### Experiment Using EasyPET



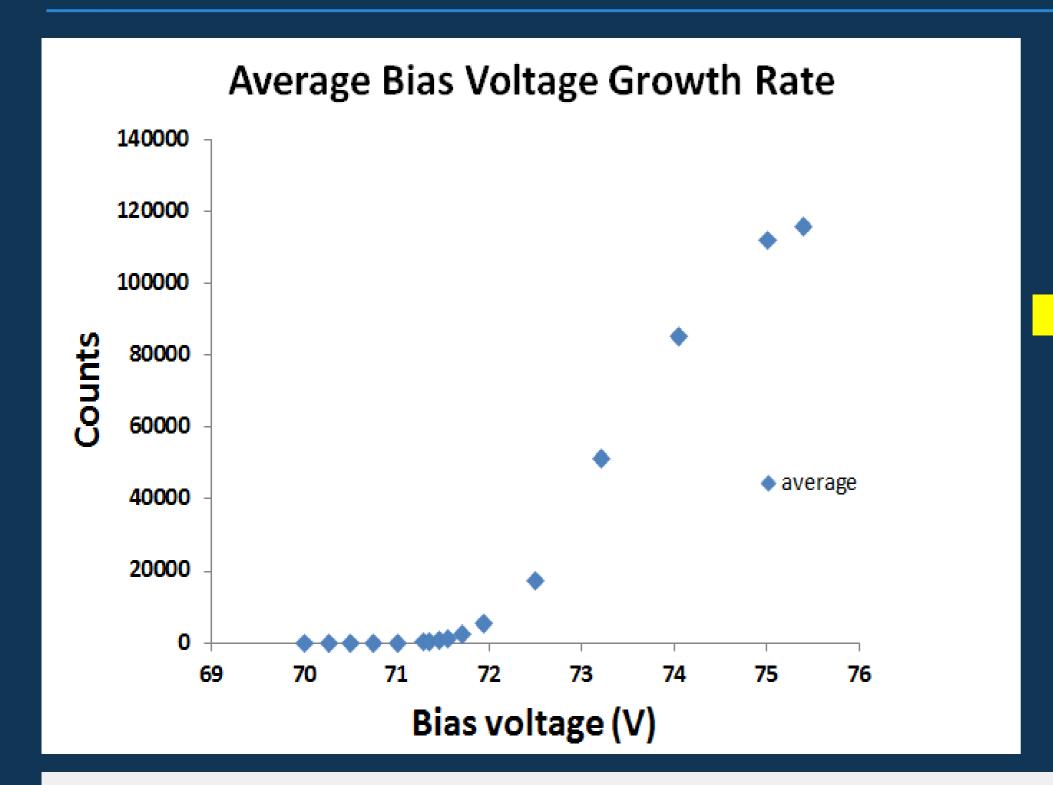


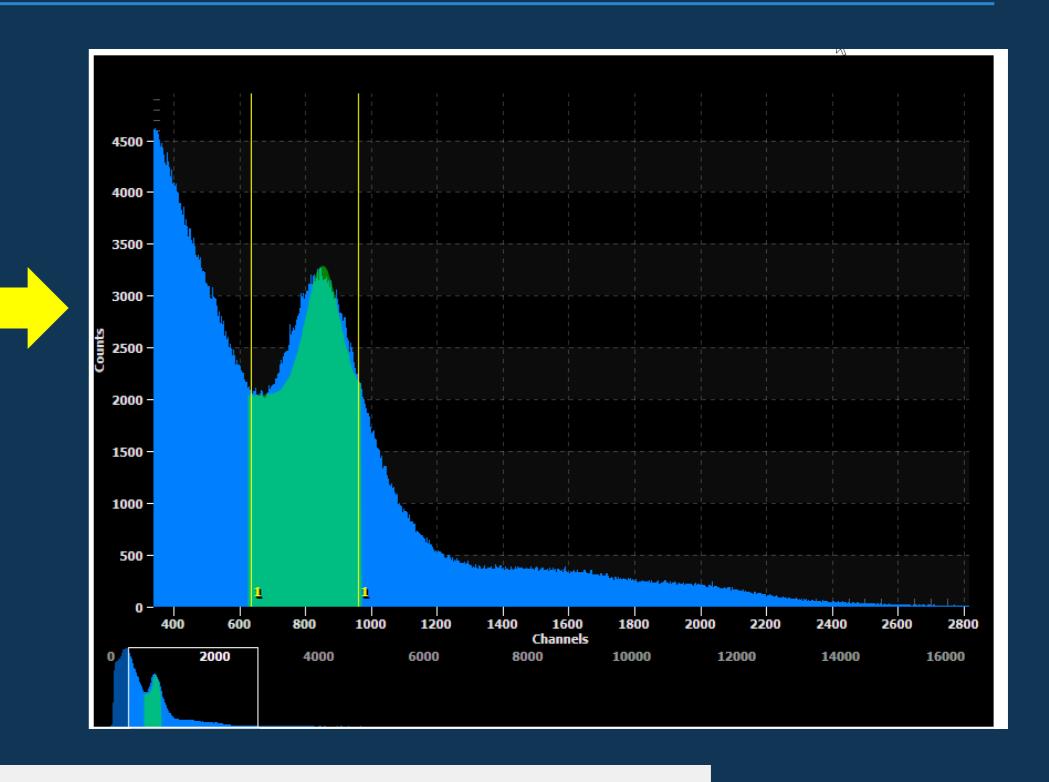










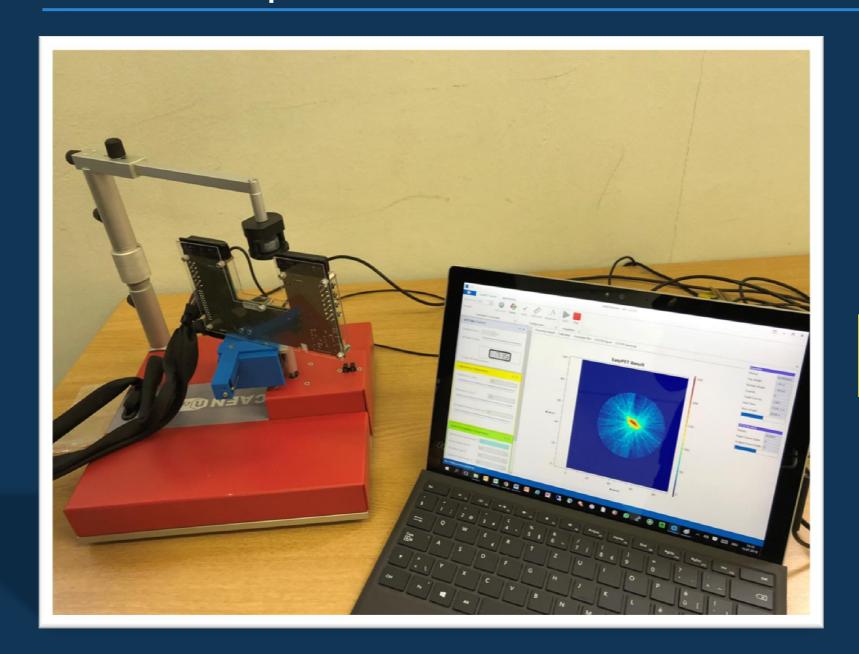


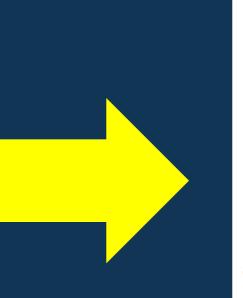
Cursor 1	Cursor 2	Centroid - Ch	FWHM - Ch (%)	A	A-BG
600	1000	868.32	146.643 (16.89)	708979	171238



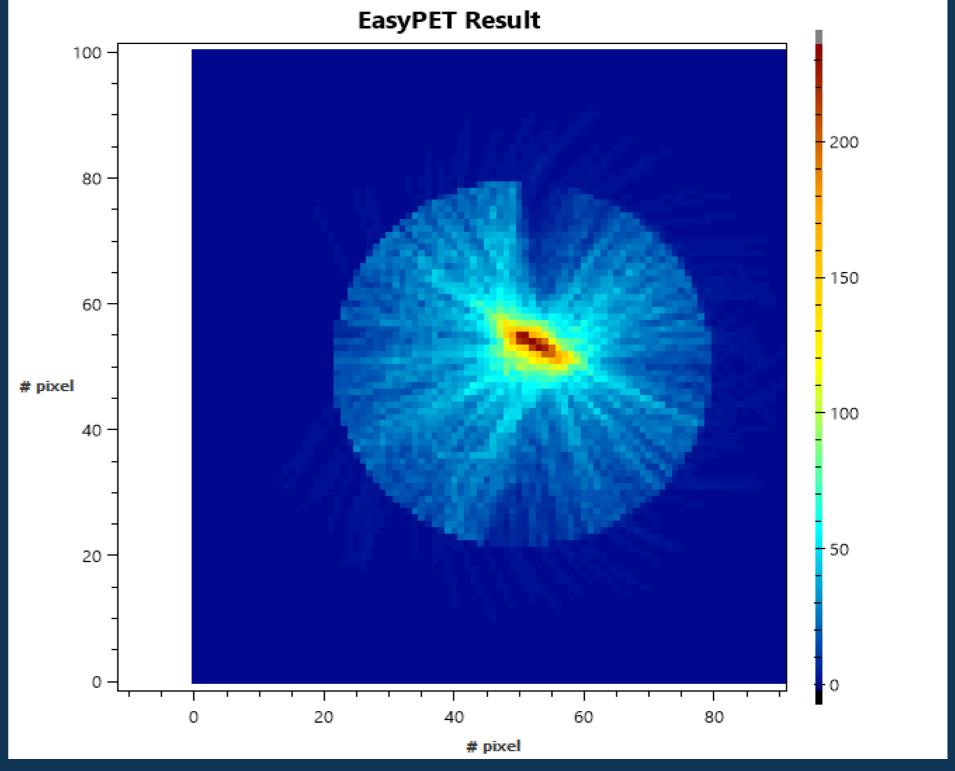


### î Experimental Results Cont...















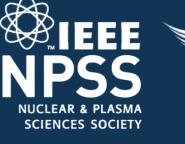
### Summary & Conclusion

- EasyPET is affordable
- EasyPET is financially viable
- EasyPET good for small scale experiments for PET
- EasyPET is a good for teaching PET
- PET Education is necessary for students in Physics





- https://ieeexplore.ieee.org/document/8069360/
- https://www.sciencedirect.com/user/chooseorg?targetURL=%2Fscience%2Farticle
  cle%2Fpii%2FS016890021630362X
- https://euraxess.ec.europa.eu/jobs/213734
- http://repositorio.ul.pt/bitstream/10451/31700/1/ulfc124076\_tm\_Pedro\_ S%C3%A1.pdf





# Questions???



