

Studies performed on previous J-PET prototypes

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Assembly of J-PET prototype consisting of 192 detection modules, read out by constant multi-threshold digital electronics, was recently finished at Jagiellonian University. Before its construction two smaller prototypes were developed, build out from 24 and 2 modules [1, 2, 3].

These systems were extensively used for tests of calibration and optimisation techniques as well as development of acquisition system which final version was used in current prototype.

In this presentation a description of performance of first J-PET prototypes will be presented and discussed.

- [1] P. Moskal, Sz. Niedźwiecki et al., *Nuclear Instruments and Methods in Physics Research Section A* 764, 317 (2014)
- [2] L. Raczyński et al., *Physics in Medicine & Biology* 62, 5076 (2017)
- [3] T. Bednarski, PhD Thesis 2016.