

Response to reviewer comments - Test-beam measurements of instrumented sensor planes for a highly compact and granular electromagnetic calorimeter

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1 Chapter 2

The complete experimental layout for the γ -laser mode of LUXE includes two calorimeters, one for the electron side and a different one for the positron side, the calorimeters are called ECAL-E and ECAL-P, respectively, with the letter "E" standing for "electron" and the letter "P" for "positron".

The challenges in both modes of LUXE, the efficient detection of single showers on top on a widely spread background and the overlapping showers in large positron multiplicities, are met with this design.

2 Chapter 3.1

For the individual pad-response analysis, the area of each pad ($5 \times 5 \text{ mm}^2$ for GaAs pads and $5.5 \times 5.5 \text{ mm}^2$ for Silicon pads) was subdivided into a 10 by 10 grid. The GaAs pad area was taken as 5 mm to include 0.15 mm of traces or empty area on each side of the pad and study the signal drop there. Each square in Figure 3 represents an area of $0.5 \times 0.5 \text{ mm}^2$ for GaAs pads and an area of $0.55 \times 0.55 \text{ mm}^2$ for Figure 4. The rectangles on the periphery of Figures 3 and 4 were partially cut off squares which have been fixed to be shown completely in the revised version of the paper.

The horizontal axes of Figures 5 and 6 represent the "strip number" of the 100 strips in which the pad area was divided. The pad area was separated into 100 strips of width 0.05 mm for GaAs and width 0.055 mm for silicon. For Figures 5 and 6, strip number 0 covers the bottom edge of the pad while strip 99 covers the top edge.