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# 3γ Imaging with $^{44}$Sc: PMT Calibration and Data Processing in Xemis 2

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The new 3γ imaging technique, based on the use of the radionuclide 44Sc, enables the direct three-dimensional reconstruction of a radioactive source from the simultaneous detection of three gamma photons. This approach has the potential to reduce both acquisition time and injected activity compared to conventional nuclear imaging methods. To investigate this concept, a liquid xenon Compton telescope named XEMIS2 is currently under development. The assembly and calibration of the detector are nearing completion, and dedicated data analysis tools are being designed to process raw signals into reconstructed images.This contribution focuses on the calibration of the photomultiplier tubes (PMTs) and the development of the dedicated data processing chain between the ouput of the camera and the input of the reconstruction algorithm.

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