

## Performances of AGATA at high energies

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We propose to conduct an experiment aimed at assessing the performance of AGATA at energy levels of up to 4.8 MeV. Investigating AGATA's response to highly energetic gamma rays, specifically focusing on efficiency, resolution, and the performance of the tracking algorithm, is a matter of considerable interest within the scientific community. However, such an evaluation has not yet been undertaken. The measurements outlined in this Letter of Intent will be executed in collaboration with the utilization of standard, long-lived radiation sources readily available at the Laboratori Nazionali di Legnaro (LNL). These sources include  $^{241}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{152}\text{Eu}$ ,  $^{60}\text{Co}$ , and  $^{226}\text{Ra}$ . Additionally, we plan to procure a short-lived source of  $^{56}\text{Co}$  specifically for this experiment.

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