

Gamma ray spectroscopy with AGATA with slow and fast beams

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Gamma ray spectroscopy is a very useful tool for nuclear structure and nuclear physics in general.

The direct view inside the nucleus gives important information on the nuclear properties.

Progress in detector technology always resulted in new results in nuclear physics. For this reason the development of next generation HPGe detectors started.

The Advanced GAMMA Tracking Array (AGATA) [1,2,3] is a European project to develop and operate the next generation

gamma-ray spectrometer. AGATA is based on the technique of pulse shape analysis, spatial detection of the interaction points of the impinging gammas and gamma-ray energy tracking in electrically segmented high-purity germanium crystals

The advanced gamma ray tracking array AGATA will be discussed in his

Technical details, use at LNL and GSI, type of experiments, results and future Physics campaign @ GANIL and different facilities.

[1] "Conceptual design and infrastructure for the installation of the first AGATA sub-array at LNL"; A. Gadea, et al. NIM A 654 (2011) 88–96

[2] "AGATA –Advanced Gamma Tracking Array"; S. Akkoyuna, et al, Nucl.Instrum.Meth.A668:26-58,2012

[3] "On the Road to FAIR: 1st Operation of AGATA in PreSPEC at GSI"; N. Pietralla, et al, EPJ 66 (2014)02083

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