

AGATA Performance

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September 13, 2017

Performance...?

The product of

- Detector performance
- Performance of electronics/DAQ
- PSA
- γ -ray tracking
- Analysis methods

What we are trying to achieve

To give information about some of the factors, and show the present status of the final product by, hopefully, offer you a set of presentations and the possibility to openly discuss the "performance" of AGATA.

In this session . . .

- Dr. Hongjie LI, "AGATA@GANIL detector status", to tell you how our expensive hardware is performing.
- Dr. Emmanuel CLEMENT, "Efficiency studies", to detail the extensive work done by many of us to understand the efficiency of the AGATA(-VAMOS) setup.

in tomorrow mornings session ...

- Dr. Araceli LOPEZ-MARTENS, "Improving tracking at low energies and tracking efficiency", showing the progress made on the tracking side.
- Dr. Amel KORICHI, "AGATA response at high multiplicities", addressing the important issue of high-multiplicity events.

and in the tomorrow afternoon session

- Philipp R. John, "Triggers and event selection using multiplicity in AGATA", who share his experience in using γ rays in as only trigger.
- Rosa Maria Perez Vidal, "In-beam performance of AGATA for lifetime measurements in transfer reactions", who will give an example of the final product showing her analysis of a plunger experiment using AGATA-VAMOS and the Cologne plunger (Rosa could not come here this week so I will present this, sorry. . .).

and in tomorrow's session

And, to us an important point

An open discussion on the performance of AGATA during the physics campaigns

The idea is an open discussion around AGATA performance from the users, i.e. physics production point of view.

- Does it work as you thought?
- Does it work as you wish?
- Strong points?
- Weak points?
- Questions. . .

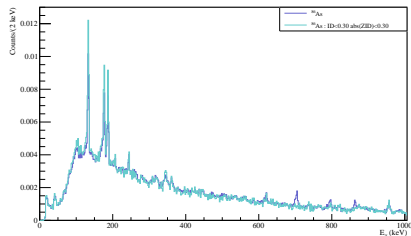
But first some slides from contributors that could not attend (J. Dudouet)

Performance of AGATA (and VAMOS) for fusion-fission experiments

Experiment

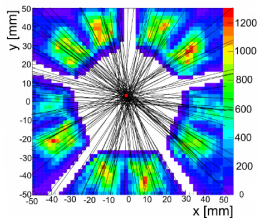
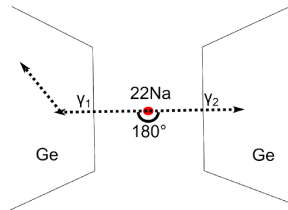
- AGATA 24 crystals, -8.8 cm
- VAMOS at 28 deg, $B\rho = 1.05 \text{ Tm}$
- ^{238}U beam, 25 nAe on ^9Be target

Gamma-ray spectra



But first some slides from contributors that could not attend (L. Lewandowski)

Reconstruction of coincident γ rays with ^{22}Na

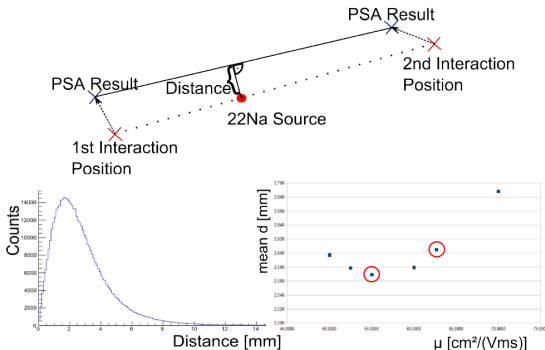


- reconstruct 180° coincidences from ^{22}Na
- distance to known source position is a measure for PSA performance



But first some slides from contributors that could not attend (L. Lewandowski)

PSA optimization with ^{22}Na



- use mean distance to the source for PSA performance
- determine properties in variation procedures
- electronic response, hole mobility, grid search algorithm improvement, ...

