



AGATA Detector Characterisation

Objectives and status report

Characterisation Objectives

- How does the position performance of each AGATA detector vary with:
 - Crystal shape
 - Impurity gradient
 - HV
 - Axis orientation
 - Differential cross talk

Characterisation Methodology

- Perform a coincidence scan of 3 of each shape of detector
- Compare experimental data sets
- Optimise theoretical system basis

Scanning table status

- Liverpool (Conventional coincidence)
 - Fully operational
 - New technician
 - GRETINA cards
- Orsay (New coincidence)
 - Validation work performed
 - Operational and available
 - TIGRESS cards
- GSI/Strasbourg (New method)

Characterisation & PSA

Characterisation

- Presentations
 - Status of the Liverpool scanning system (C.Unsworth)
 - Coincidence scan IPHC scans, collaboration with GSI and future plans (F.Didierjean)
 - The C001 depletion voltage scans (S.Moon)
 - Impurity profile from C-V Measurements (B.Birkenbach)
 - Coffee Break

Characterisation & PSA

PSA

- Presentations (R.Gernhäuser)
 - Analysis from Coincidence Scanning data (C.Unsworth)
 - Scan table data and Pulse Shape Analysis using NARVAL (A.Robinson)
 - Experimental Tests on Position Resolution (R.Venturelli)
 - Dealing with partly missing energy information (F.Recchia)
 - First Pulse Shapes for Comparison Method (F.Crespi)
 - Implementation of the PSO Algorithm (M.Schlarb)
 - Grid Search on a GPU using OpenCL (E.Calore)
 - A faster FEM simulation (J.Ljungvall)