

Short Update on the NTD Analysis :
Alpha vs Theta – for MMT 1, MMT 3, and MMT 2 Regions

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MoEDAL

COLLABORATION

2b.) and 2c.) → Top Priorities !

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➤ **1.) Geometry (G4 Material Map) :**

1b.) Variable VELO side material densities in the MoEDAL Materials

Work in Progress

➤ **2.) Simulation and Analysis software :**

2a.) VeloGaussMoni to be used ? (Not sure yet, DEBUG needed...)

Work in Progress

2b.) The limit of distributed GRID simulations has to increase !)

2c.) Plane NTD coordinates introduced for the MMT3, MMT1, and MMT2 regions :

Work in Progress

20 + 44 + 54 NTD Modules (comparative study) 

2d.) Dyon simulations (Philippe: high electric charges (>1e, up to ~500e) – understand effects of possible corrections to dE/dx (eg, charge screening))

2e.) Dyon simulations (Philippe: high magnetic charges (>6gD, up to ~10gD) – test if the simulation can handle very high dE/dx)

Programme – READY to be uploaded on the SVN !

2c.) Plane NTD coordinates introduced for the MMT3, MMT1, and MMT2 regions :

20 + 44 + 54 NTD Modules

2c.) *Plane NTD coordinates introduced
for the MMT3 and 'MMT1 regions :*
20 + 44 NTD Modules
(comparative study)

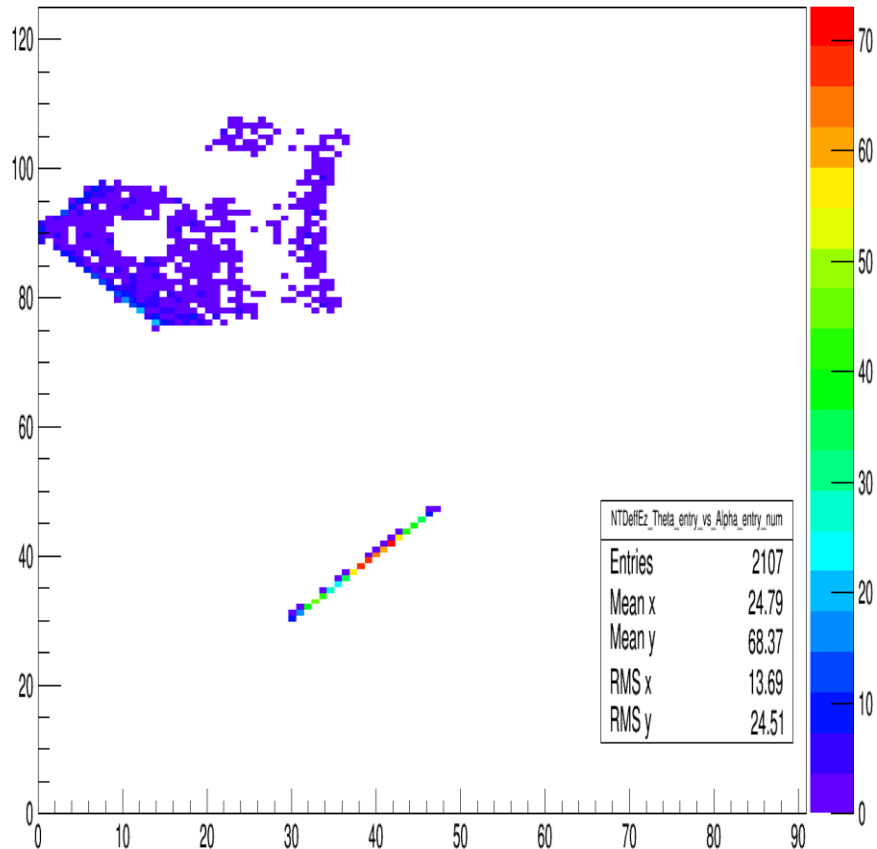
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MMT 1 + MMT 3
64 Modules

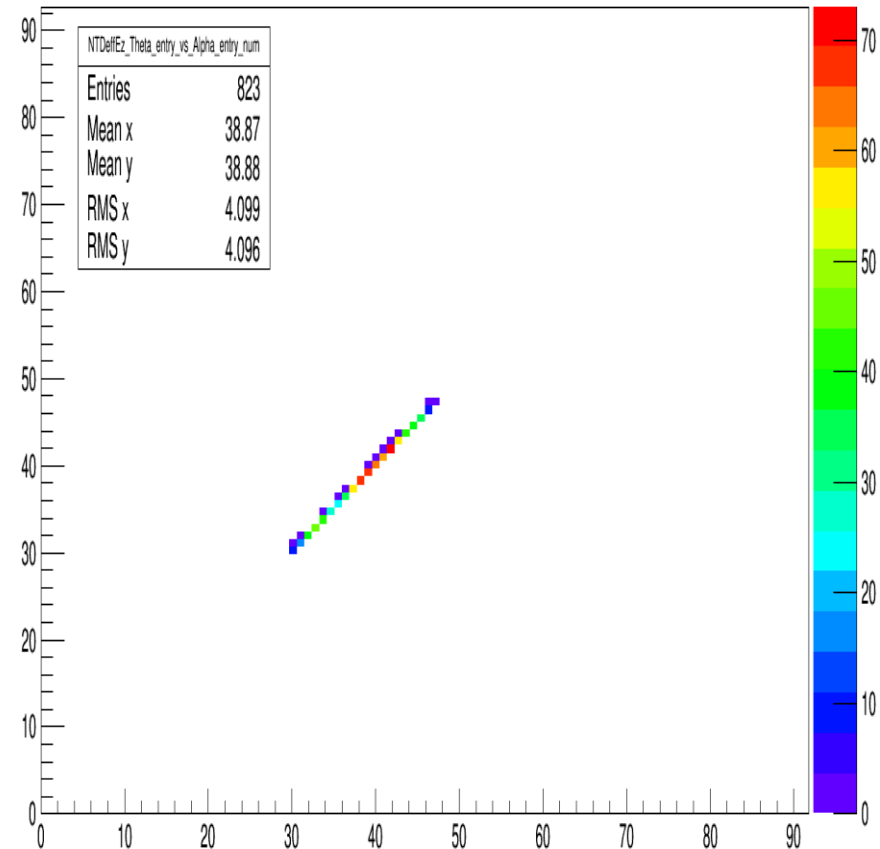
$$\theta = f(\alpha)$$

MMT 3
20 Modules

NTDefEz_Theta_entry_vs_Alpha_entry



NTDefEz_Theta_entry_vs_Alpha_entry



Thank you !