

# A comparison of $^{238}\text{U}$ radioactivity level using HPGe and ICP-MS measurements at CUP

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- Extremely rare-event search experiment
  - AMoRE, COSINE @ CUP
- Assay method – HPGe and ICP-MS
- Efficiency error on HPGe analysis
  - Geant4.9.6 :  $^{234\text{m}}\text{Pa}$  decay not matched with NNDC
  - Geant4.10.4 : except  $\gamma$  intensity  $^{234\text{m}}\text{Pa}$  decay matched
- Comparison HPGe analysis of  $^{238}\text{U}$  decay upper chain,  $^{234}\text{Th}$  and  $^{234\text{m}}\text{Pa}$ , with U analysis results of ICP-MS  
(A:  $\text{Na}_2\text{CO}_3$ , G:  $\text{CaCO}_3$ )

Poster 109

