

CYGNO simulation updates

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CYGNO simulation meeting

Status of toy-MC and data-MC comparison

Comparison with ^{55}Fe data with GEM1 HV scan

- Now simulating the HV GEM scan at different distances from the GEM → Giulia
 - data taken with LIME in Frascati in April: 46, 41, 36, 31, 26, 21, 16, 11, 6.5 cm
 - simulations done, now trying to put on the cloud with new Giovanni's scripts
 - will be accessible to Donatella and everybody
- To do: reconstruct the data and MC with the same code
 - test new branch of the reconstruction code “autumn21”

Other news

- New master student in Roma 3, Pietro
 - now learning how to run digitization code in different configurations on ER simulations from 1 to 60 keV
 - with and w/o background noise
 - change source distance from the GEM plane, change HV
 - with and w/o saturation
 - next steps:
 - data/MC comparisons: ^{55}Fe and/or other datasets taken with LIME in summer 2021 (variable x-ray source, ^{137}Cs , ...)
 - optimize saturation code: find a parameterization strategy or improve code
 - suggestions..?