

CYGNO simulation plans

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CYGNO simulation meeting

Plans & to do

1. LIME background simulations → compare final MC spectrum with data
 - full simulation of LIME, including hits info done → files already in the cloud
 - test/migration of digitization code on the cloud Pedro + Roma 3 group?
 - digitization of all tracks including all effects (saturation,vignetting,...) } Pedro + ?
 - reconstruction of all tracks
 - finally add all the contributions
2. CYGNO background simulations and ER simulations Giulia + ?
 - Full background simulation using latest design
3. PMT simulations
 - PMT simulations Mariana, Rafael
 - integrate in digitization code Roma3

LIME AmBe simulations

Neutron flux with PE shields (assuming 100 n/s):

- 50 cm (wall between LIME and experimental hall)
→ about 10^3 reduction
- 20 cm (users in control room)
→ about 10 reduction

