

CYGNO cluster at LNGS

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26/10/20

CYGNO simulation meeting

Code & tools

- SRIM download page: <http://www.srim.org/SRIM/SRIMLEGL.htm>
- GEANT4 CYGNO simulation: <https://github.com/CYGNUS-RD/CYGNO-MC>
- Toy MC: <https://github.com/CYGNUS-RD/digitization>
- CMOS noise simulation:
<https://github.com/CYGNUS-RD/cygn-noise-simulation>
- Reconstruction code: <https://github.com/CYGNUS-RD/reconstruction>

cygno-login

- Virtual machine for cygno analysis and simulation
- CENTOS 8 operating system, with python 3.8, ROOT and Geant4 installed
- Tested with cygno codes (background simulation, toy MC, noise simulation, reconstruction)
- Ask an account to us → we will forward all requests to LNGS calcolo
- Double login:
 - first login to `linux.lngs.infn.it`
 - then `ssh cygno-login` (same credentials)
 - create your user workspace in `/nfs/cygno/users`
 - use setup script: `source /nfs/cygno/setup_cygno_login.sh`
 - PBS batch system, use cygno queue

cygno wiki page in progress

Each code repository has a README file, but we plan to use also a wiki page on github for instructions:

<https://github.com/CYGNUS-RD/WIKI-documentation/wiki>