

Meeting CYGNO News

LIME GAS System

In Run1, the gas system presented two issues:

- 1) The gas recovery circuit was not able to reach nominal pressure with the consequence that the recovery bottle couldn't be filled;
- 2) We found some **water** and some suspect **dust** on the outlet, with the consequence that we couldn't use the recirculation circuit and we used a lot of new gas.

To investigate the causes of those issues and solve them:

- 1) most of plastic pipes were replaced by steel one;
- 2) the gas "trolley" will be unmounted and investigated;

The plan is to re-install it by the end of January;

LIME Run 2: shield layer - 4 cm

In the meanwhile we are setting up the first layer of copper shield;

We'll start with a 4 cm thick layer that should reduce the background rate from 37 Hz to 1 Hz;

All pieces arrived and are being installed;

The plan is to have all ready by the end of January;

We'd like to setup a "task force" to follow the data tacking, managing the shifts, fast analysis and data quality control;

There will be shifts from remote and shifts presence to ensure all the operations, we'll setup web tools to book them;

CYGNO 04

The work on CYGNO 04 is going on too;

A crucial item will be the study and minimisation of the detector radioactivity;

We are setting up a repository to collect all the information available so far;

Working Group Meetings

Starting from next week, the working group meetings will be resumed:

- Monday 14.30-CET: simulation;
- Tuesday 15.00-CET: DAQ;
- Thursday 11.00-CET: analysis;