

PEPS meeting minutes 05/11/2025

Workshop and CosPa meeting (27, 28, and 29th of October):

<https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Findico.ihe.ac.be%2Fevent%2F2405%2F&data=05%7C02%7Cmateo.fernandez%40ulb.be%7C14d8>

- online participation possible
- please register if you would like to present a few slides and indicate so in the registration form

PEPS logo

- Adrian: suggestion to write down maybe the full name
- Nico likes the "boca" colors
- any other ideas are welcome

PMT characterization (Mateo's presentation)

- in September Mateo drove to FZU Prague and with the help of Martina and her group took the data for single photoelectron spectra, dependence of the gain on the high-voltage, linearity, and after pulses.

- gain is in the range of $2 \cdot 10^6$
- deviation from linearity starts at values lower than expected

(around 20mA from a 5% deviation)

- discussion on the choice of the PMTs: Martina mentioned that these PMTs did not fulfill the Auger requirements of linearity until 50mA, deduced as the peak current at 1000 m from the shower axis, for an air-shower at 100EeV. Probably they are good enough for PEPS, operating at energies 200 times lower, but this needs to be understood.

- discussion about the availability of the PMTs with Markus and Martina: from the initial negotiations with Hamamatsu, there is a production line for these PMTs so they promised a prompt delivery.

AOB:

- PMT bases to be tested, one base will be delivered by Mike Duvernois to be tested and adapted for the R5912 PMTs in Brussels.
- discussion with Jonas about the Tyvek properties and of the new raisin: understand the reflectivity and think of a joint effort to simulate the tank response.
- General infrastructure for detector developments, as discussed during the APPEC meeting would help have a better coordination of detector developments between different experiments.

The meeting lasted 1 hour (16 participants). Thank you all for attending the meeting and for participating in the discussion.