mTower analysis meeting summary
11.03.2020

For now there is no indication that the access to DESY will be restricted. We continue preparations.

Preparations for the 9-string in Bergen are going well. The readout works.
Viljar will mail the A-pad modules to Utrecht.
Cosmic data taking is ongoing.

Qasim: Presented results on the effect of the angle wrt the electron beam from the November TB. The shower developments faster, due to the increased material, but no significant change is seen in the cluster size.
Check if the size of the effect is as expected from the path length increase (cosine).
Check in the reversed mTower data.
Check in the February data.

Fabian: Presented results on the "feature" in the data. It seems to be more pronounced at 1 GeV, than at the higher energies. And it gets less with the shower depth. It is related to the geometry, not the electrical connections, it seems.
Check the runs at different temperature. Can it be related to temperature?
Check the November data.
Check for different event types.
Can it be related to the trigger (SiPM position)? Check the runs at an angle.
Can it be related to light? Can we test this?

Rene: Calculate the temperature gradients from the cooling to the centre of the chips.

Naomi: Check the SPS data from 2018.

In April we might test the different A-pad layers with some W in front, to see if we see the effect there as well.

Hiroki: Presented results for pixel masking. With only masking 7 pixels, still some hot pixels remain. Masking 75 pixels gives better results, but still some hot pixels seem to remain.
How much real signal do we sacrifice by cutting? Check some extreme cases.

Nigel/Robbie: The single event display (3D) based on LCIO tools seems viable.
Robbie: Multi-gauss fit on nr hits ongoing.