

The poster is showing three main topics:



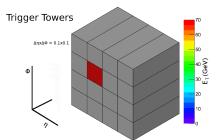
- 1 The Liquid Argon electron/photon calibration
- 2 The LAr - Trigger Upgrade and the in-situ demonstrator
- 3 Recent beam splash events

The **electron/photon calibration** comprises several steps:

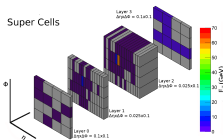
- 1 Reconstruction optimisation of electrons/photons using a multivariate technique
- 2 Response equalisation in calorimeter layers in data and simulation
- 3 Estimation of passive material upstream the calorimeter via longitudinal shower profiles
- 4 Determination of absolute energy scale using $Z \rightarrow ee$ events

LAr - Trigger Upgrade and the in-situ demonstrator:

- The LAr - Calorimeter trigger architecture will be upgraded before Phase I in order to maintain reasonable trigger rates at high electron/photon efficiency
- Therefore a concept of "Super Cells" compared to the existing "Trigger Towers" will be used
- The new architecture will be tested during Run-2 with an in-situ demonstrator that was installed in 2014



a) Existing Method



b) After Upgrade

Splash Events:

First Beam Spash events were recorded in the beginning of April which are a good instrument to spot non-uniformities in the detector response

