



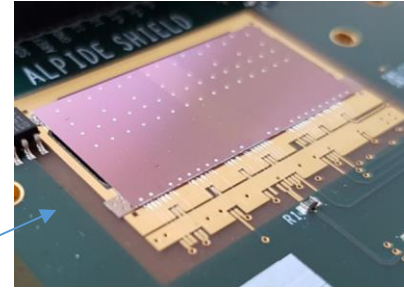
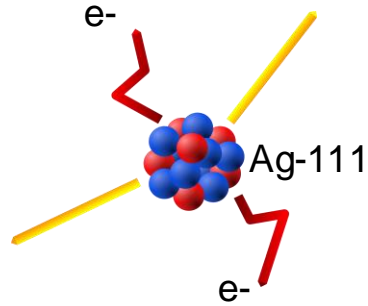
Laboratori Nazionali di Legnaro – INFN

Updates on the beta imager DUMBO

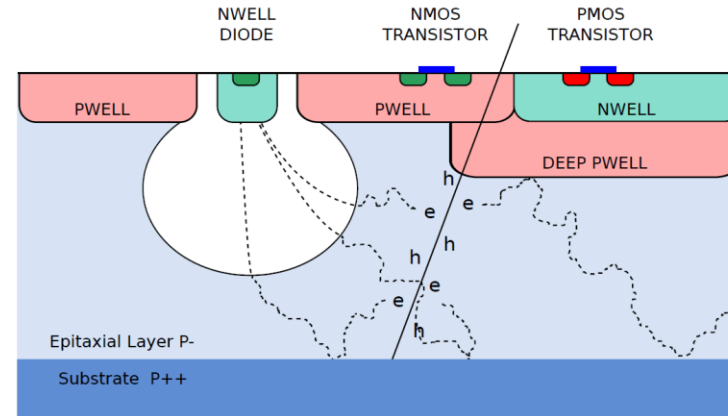
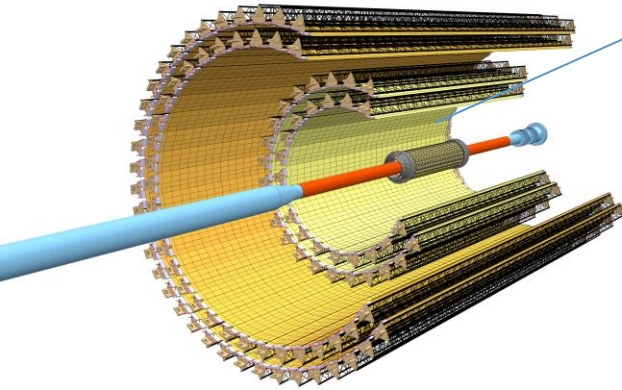
D. Serafini on behalf of the ADMIRAL WP2

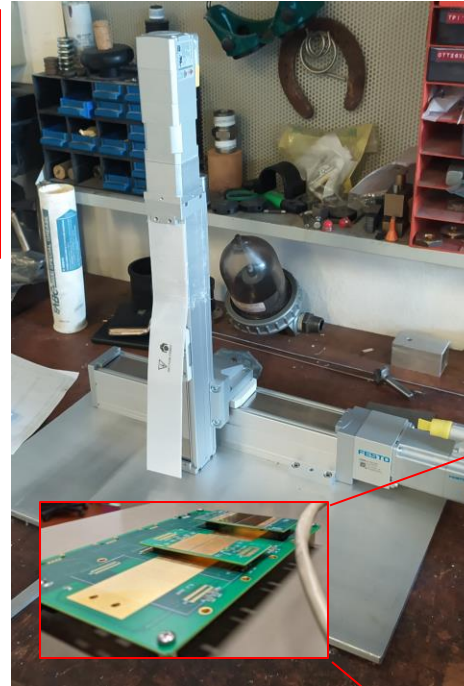
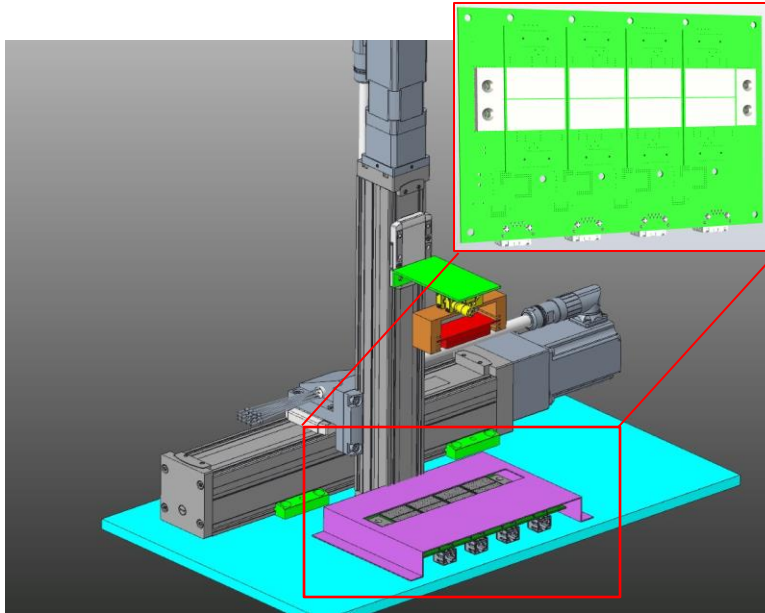
March 27th, 2025

Detector Using Maps for Beta-rays Observation

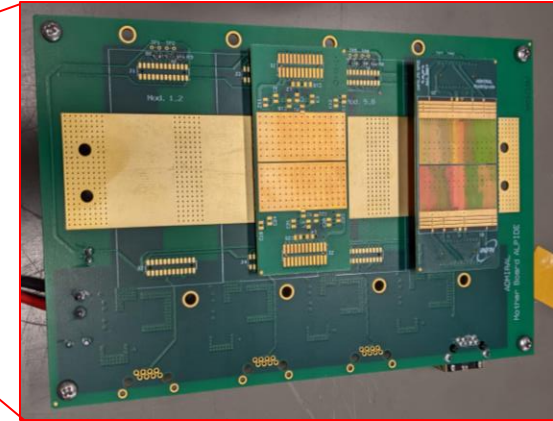


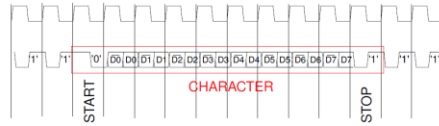
- MAPS -> ALPIDE
- ALice P1xel DEtector



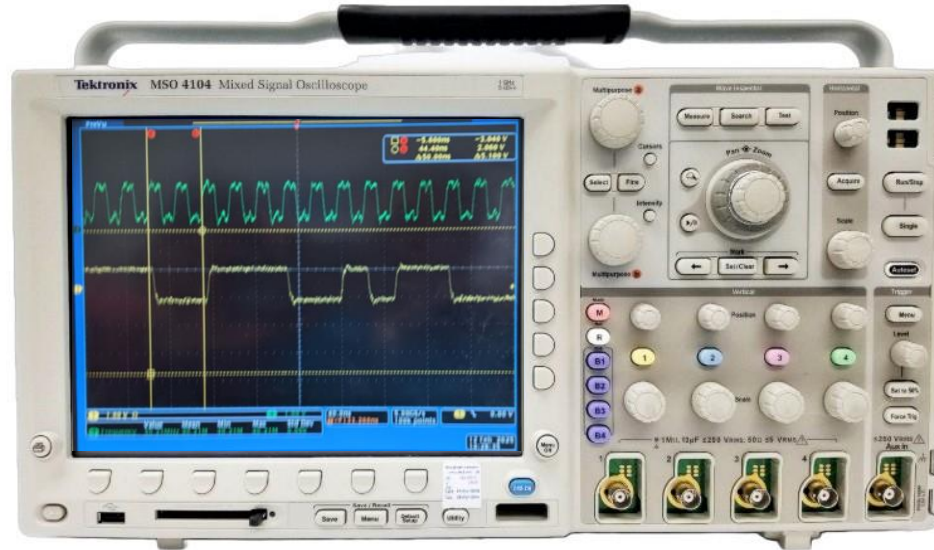


- 8 ALPIDE chips are the sensitive elements
- Mechanics system to place the sample
 - x-y movement





- Communication with the ALPIDE
- Oscilloscope to check the digital signals



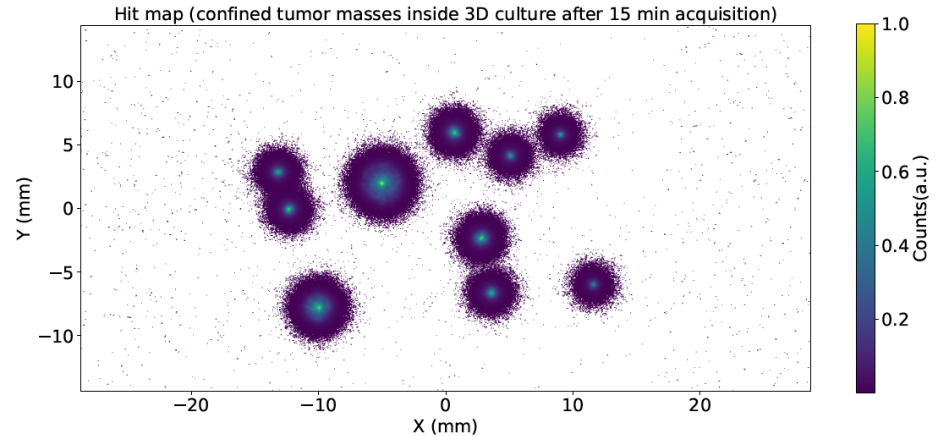
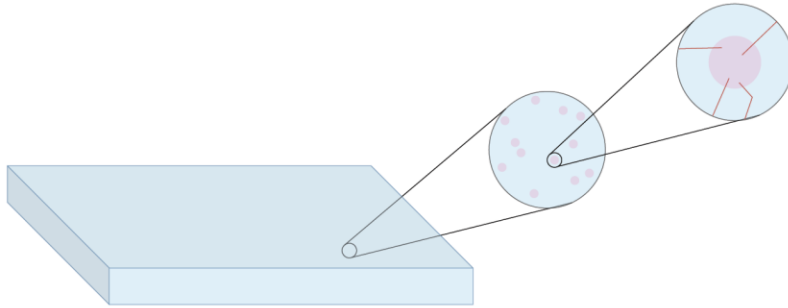
ALPIDE Operations Manual

ALICE ITS ALPIDE development team

July 25, 2016
Version: 0.3
Status: DRAFT

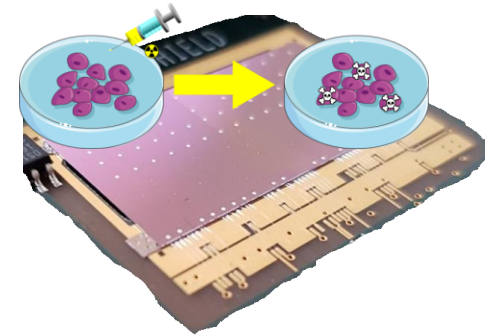
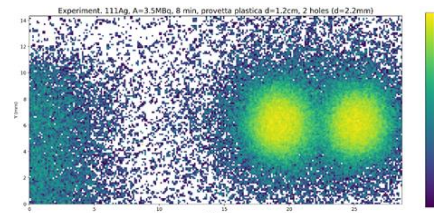
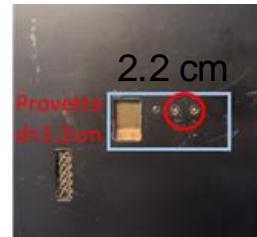


- Simulation framework developed by Vittoria Pavanello in her master thesis:
<https://hdl.handle.net/20.500.12608/51901>
- Different experimental conditions can be simulated





- Experimental test are necessary to:
 - Characterize the device
 - Validate the simulations
- Future experiments with cells:
 - Image the radioactive cells clusters in 3D scaffolds
 - Estimate the cellular radiopharmaceutical uptake



Thanks