

Preparation for scintillator tests

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For charged vetoes working group

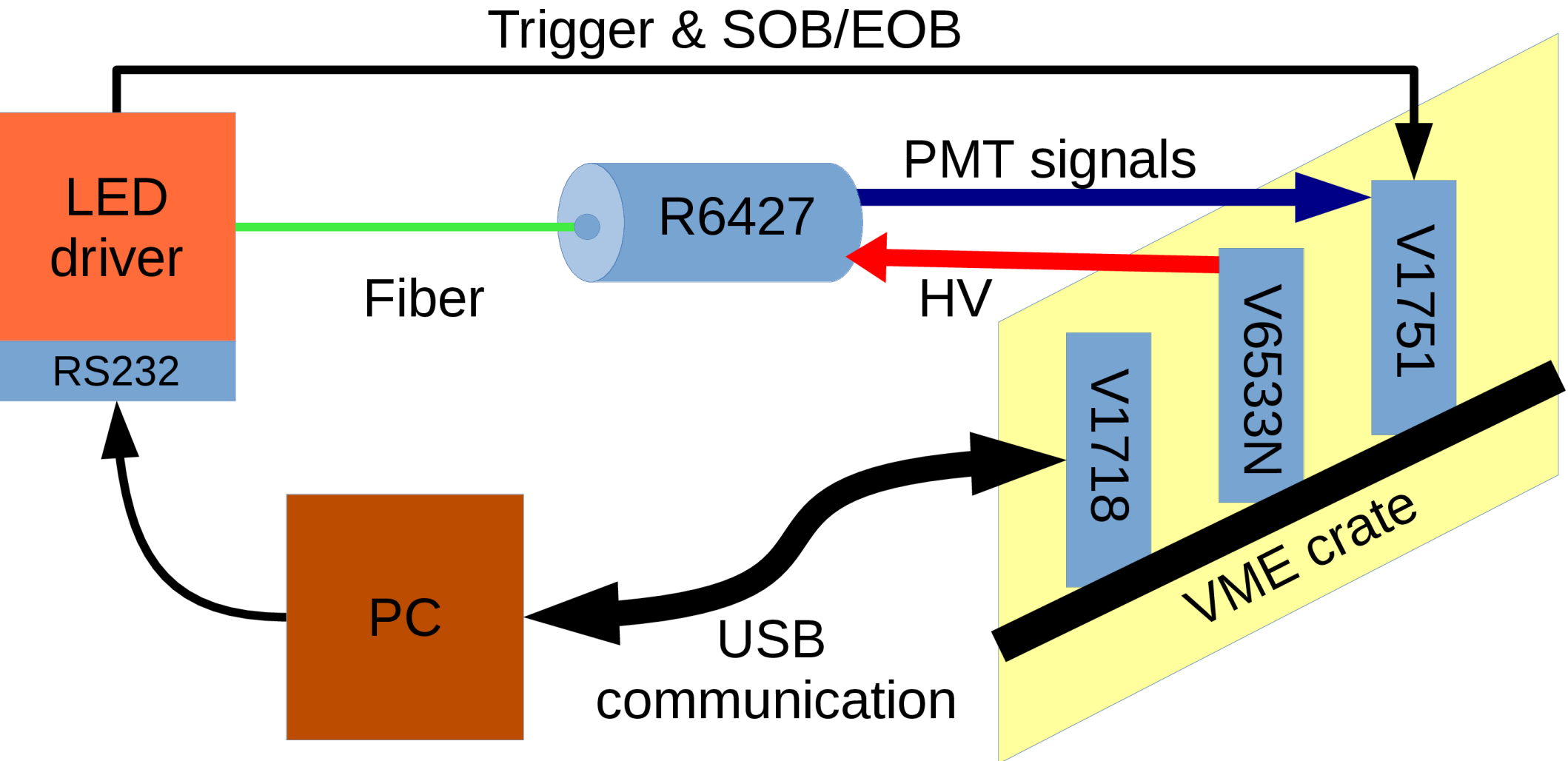
PADME collaboration meeting

01.03.2016

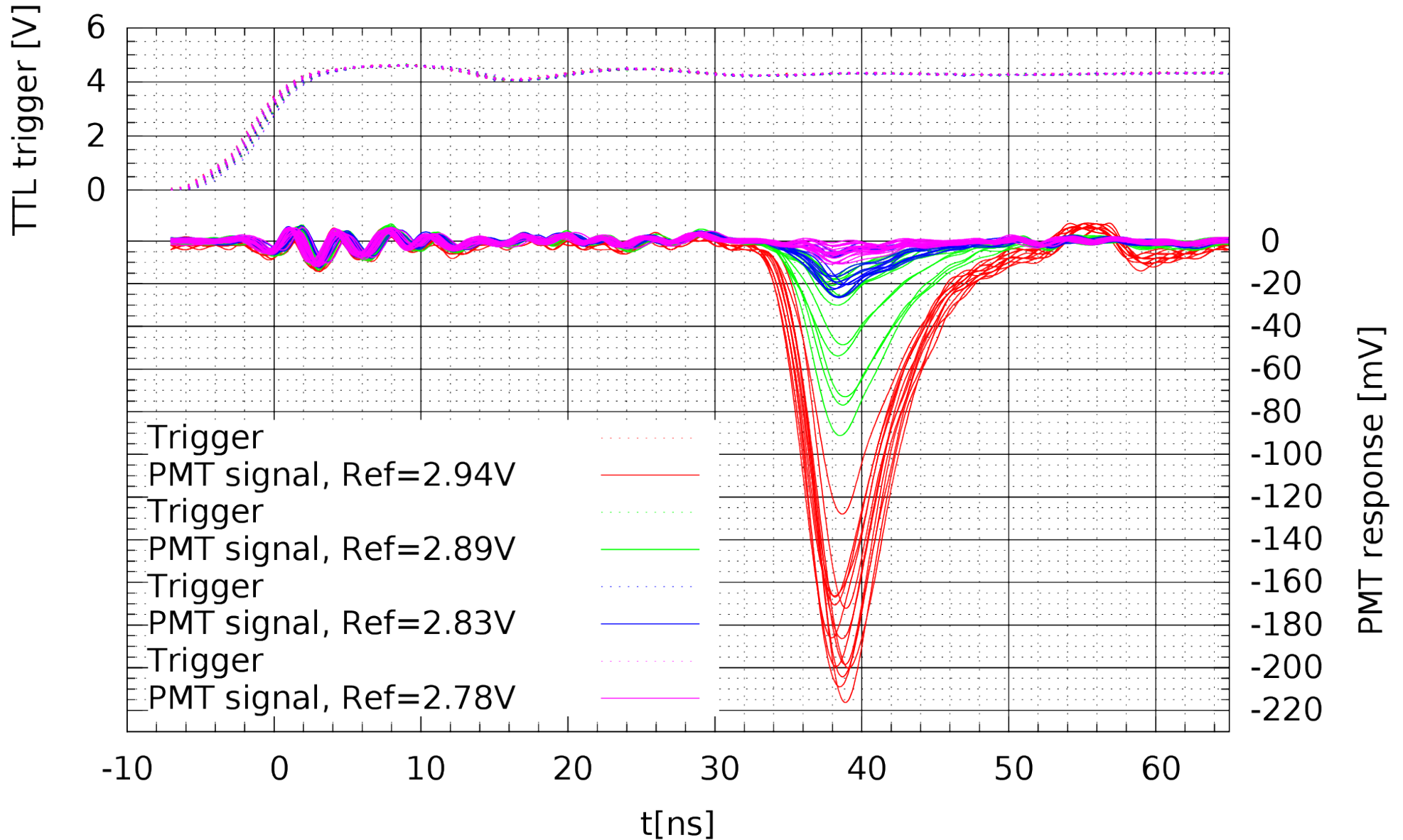
Outline

- Tools and facilities
 - Scintillation resembling LED generator
 - Light tight box
 - Precise positioning stand
- Scintillator measurements
 - Beta source
 - LED generator

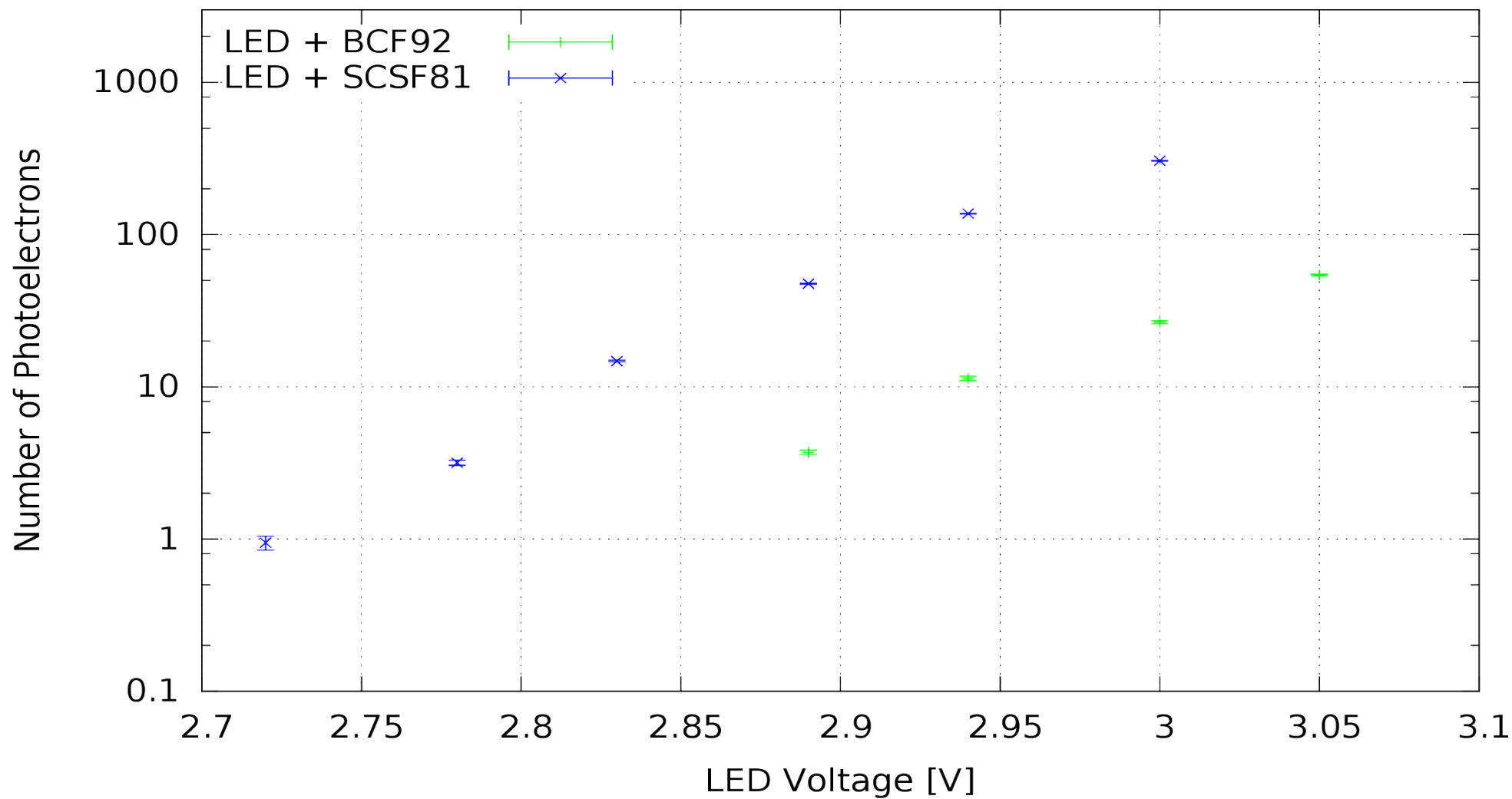
LED generator



LED generator different regimes

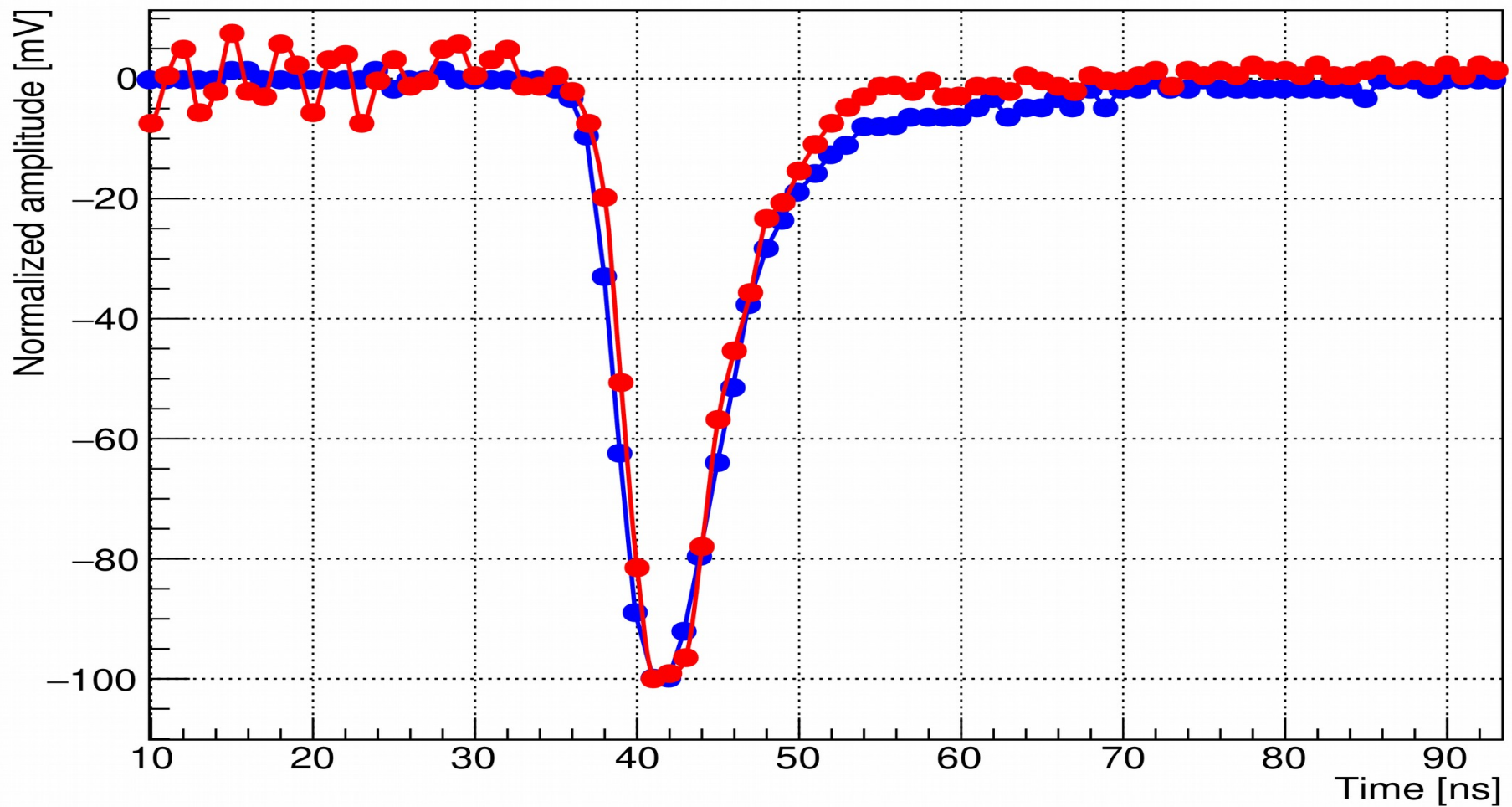


Photoelectrons vs LED ref voltage

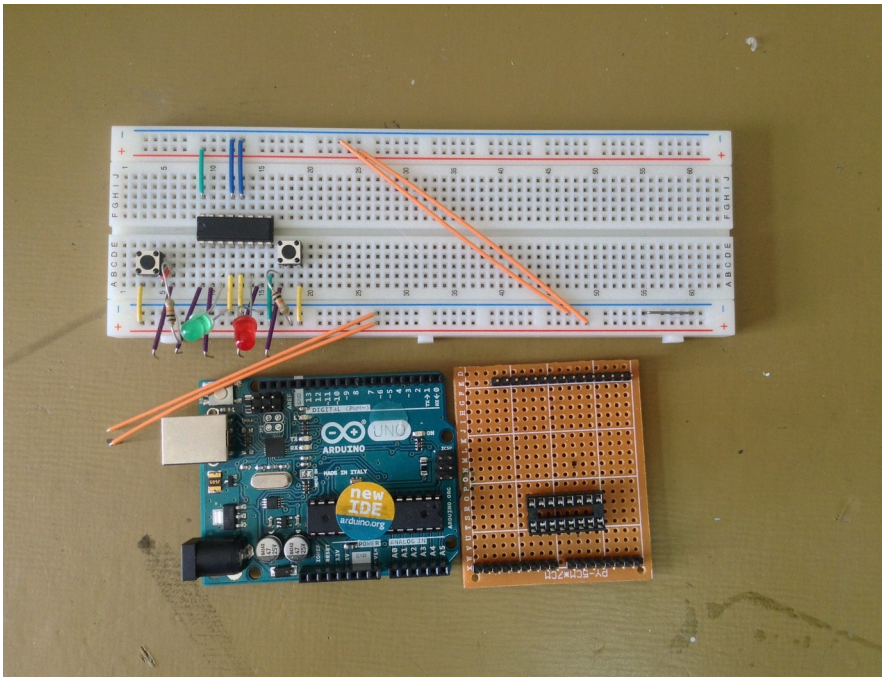


LED generator vs Scintillator

- $A(t)$; Blue – scintillator, red – LED generator



Beta/light source positioning system

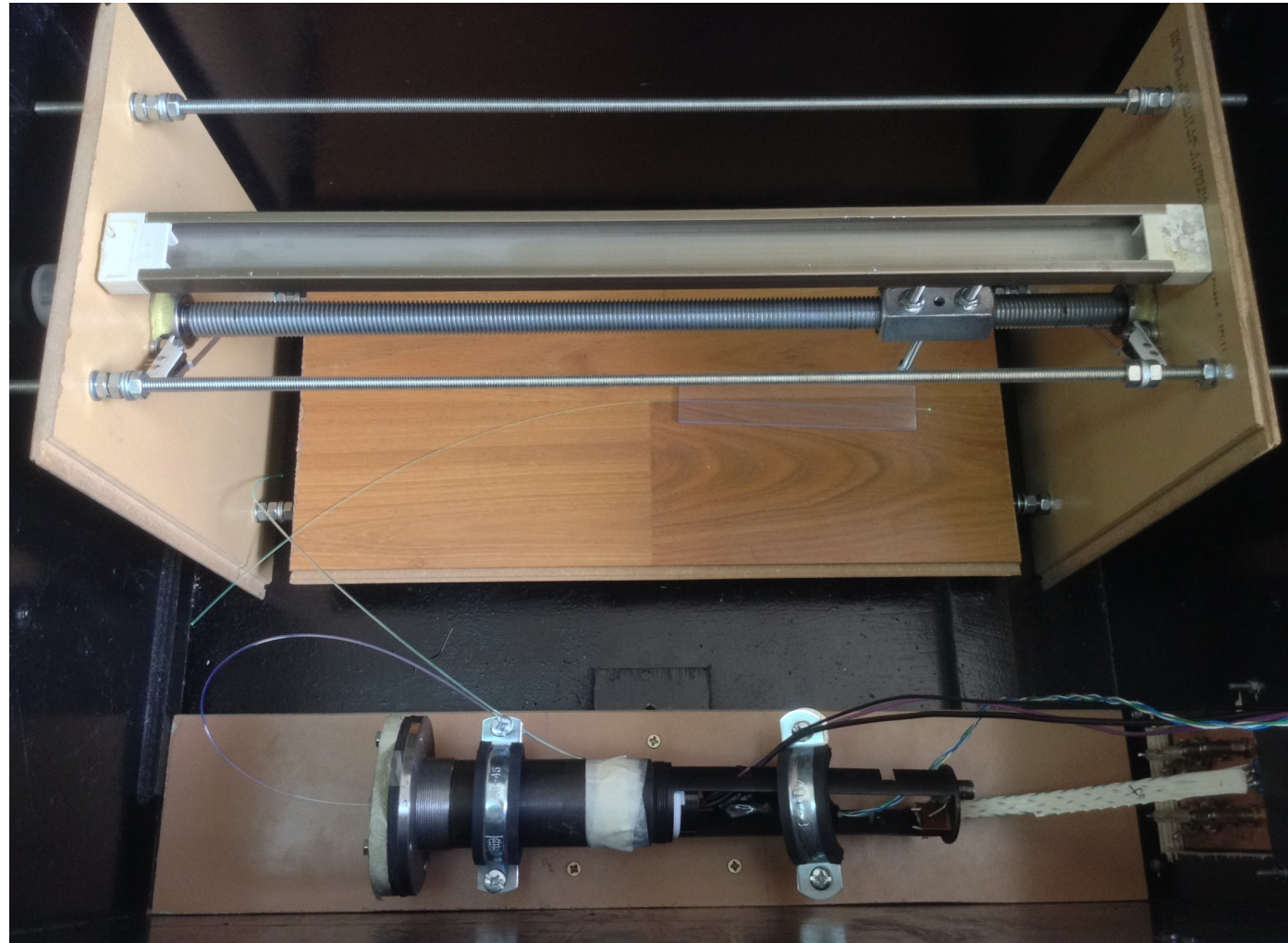


- PC/arduino controlled
- M16x2 range – 400mm



Light tight box

- Black box
- Scint. Tests
- PMT R6427



Scintillator tests

- Uniformity and light yield along the scint. bar
 - Sr/Y spectra – mean num. ph e
- Intrinsic time resolution
 - Cosmics muons
- Choice of preference for light detector
 - Attached on the scint. bar - SiPM
 - Fibre connected – MAPMT, SiPM, CCD :)