

University
of Glasgow

Commissioning PID detectors

MICE CM40

Rome, 27 October 2014

Paul Soler

TOF



❑ Remaining hardware:

- TOF installed and working since 2008
- TOF1 compatibility with PRY (<50G) should be OK
- Instead of shielding cage, have local shielding around PMTs to mitigate potential effect of SS field in TOF1: to be done by INFN team in November 2014

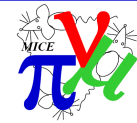
M. Bonesini



❑ Software:

- Already in good shape
- TOF calibrations performed routinely (last in Jun 2014)

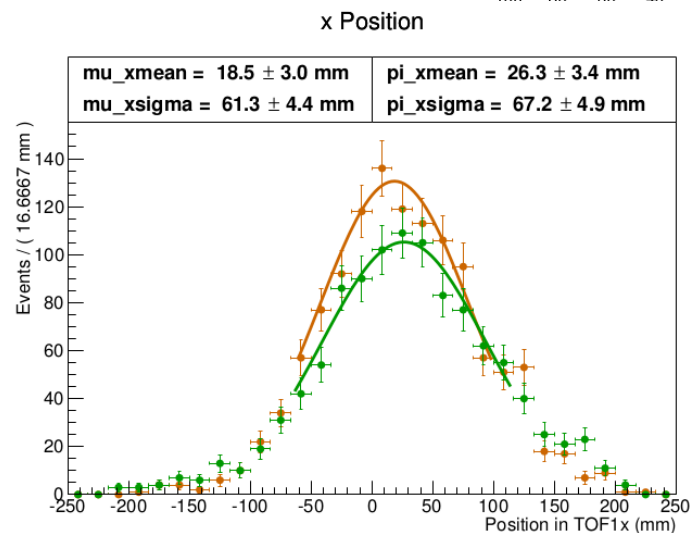
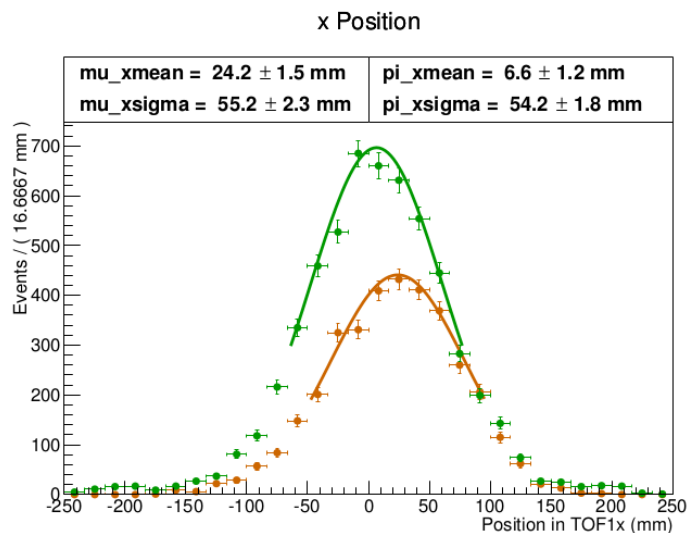
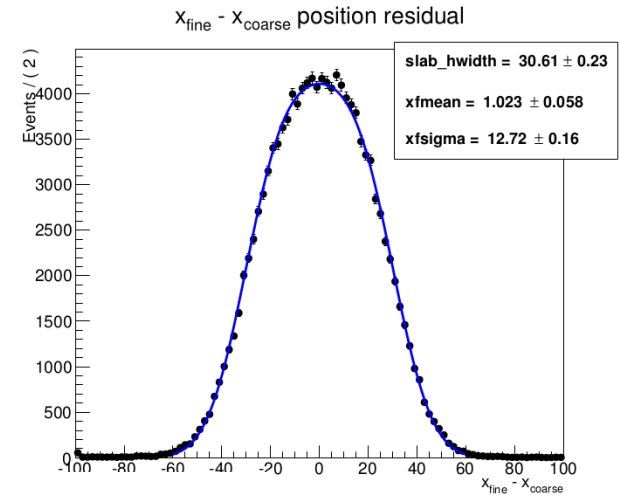
TOF



Calibrations and commissioning:

- No special commissioning
- Calibration well defined and used routinely: ~10 hours data taking with positron running

Relative alignment TOF-quads

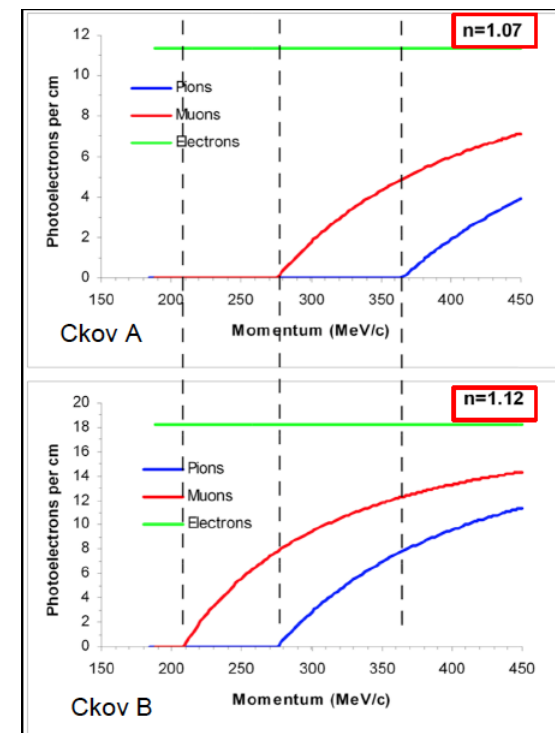
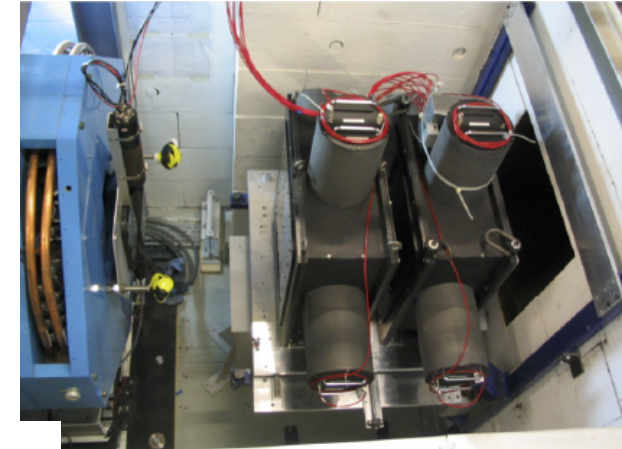


E. Overton

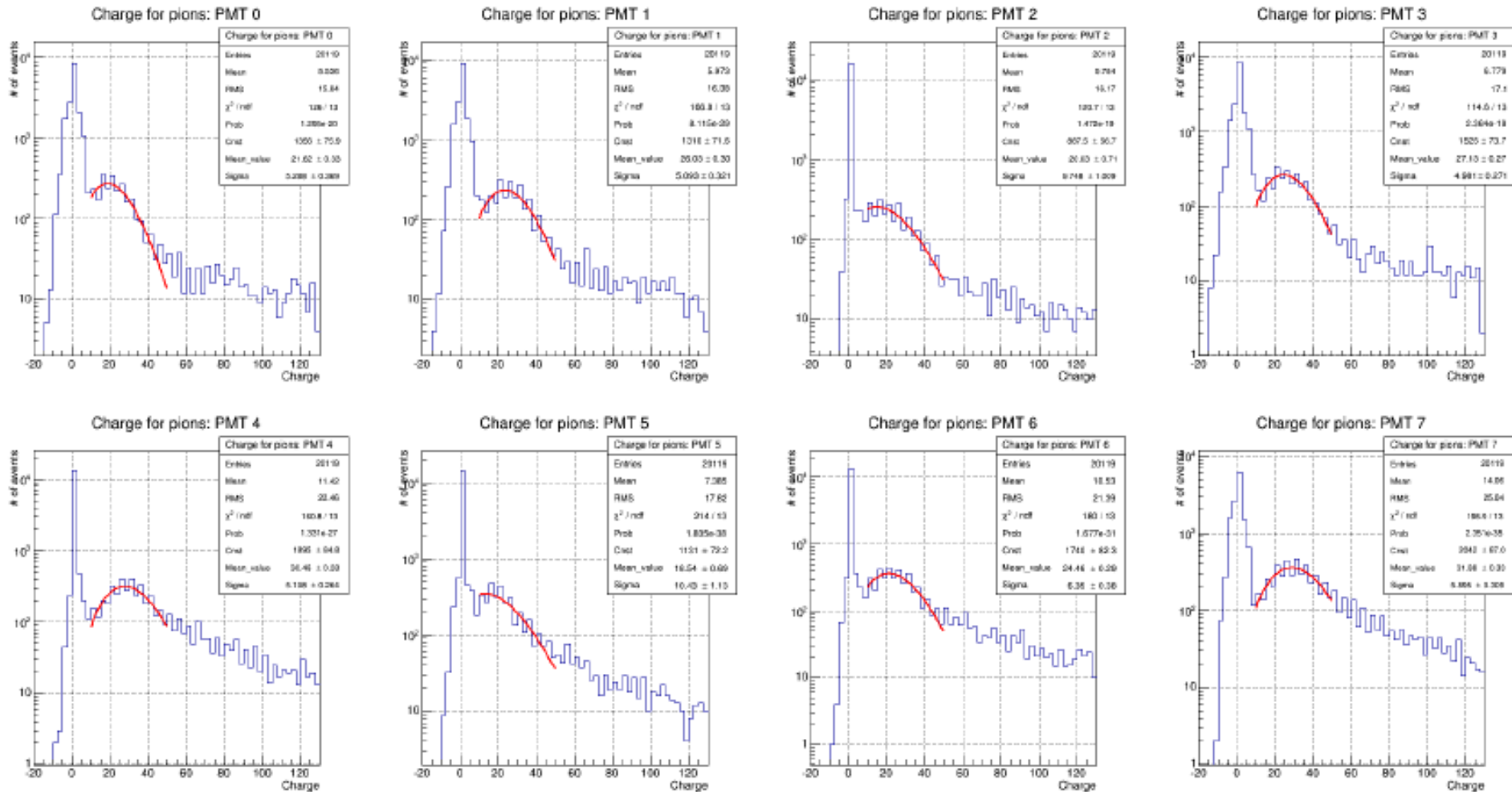
CKOV



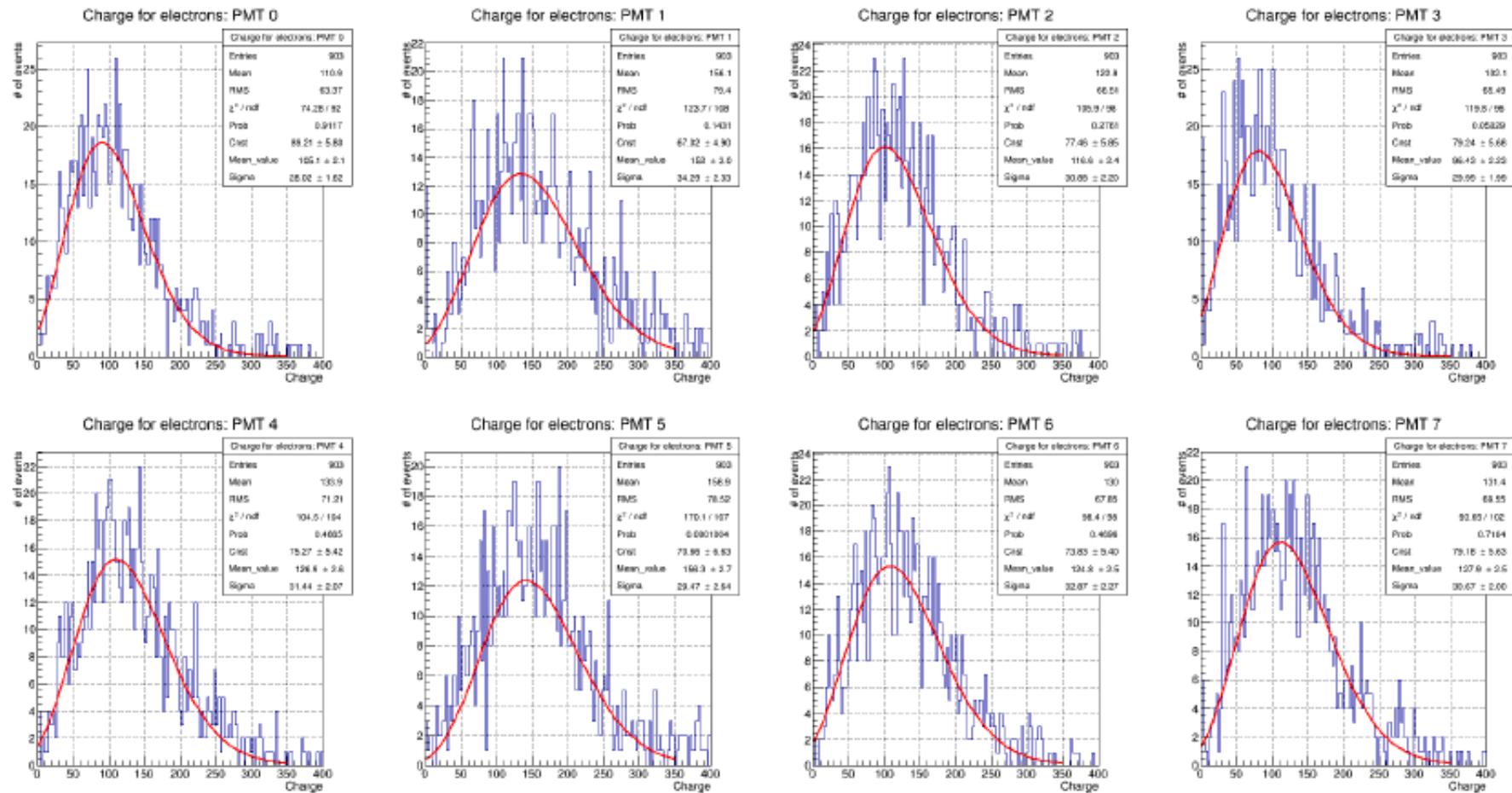
- ❑ Remaining hardware:
 - No expected changes
- ❑ Software:
 - Digitisation required
- ❑ Calibrations: **Hanlet/Rajaram/Cremaldi**
 - Pedestal runs
 - Sub-threshold pions – 1 PE
 - Electron runs: multi-PE
- ❑ Commissioning:
 - Equalise gains of PMTs
 - Cherenkov threshold scans



1 PE distributions:



Positron runs: multi-PE

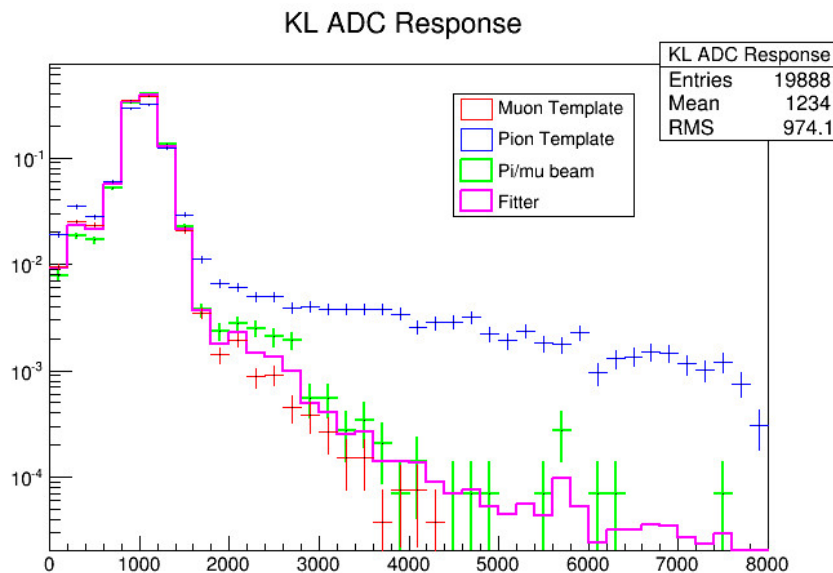
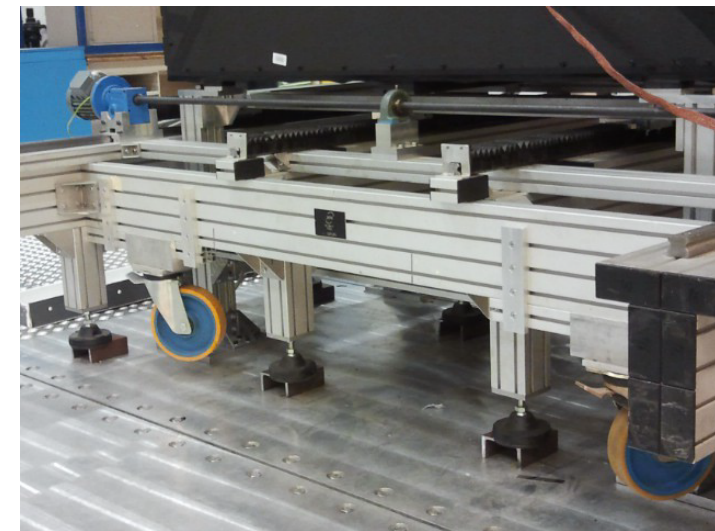
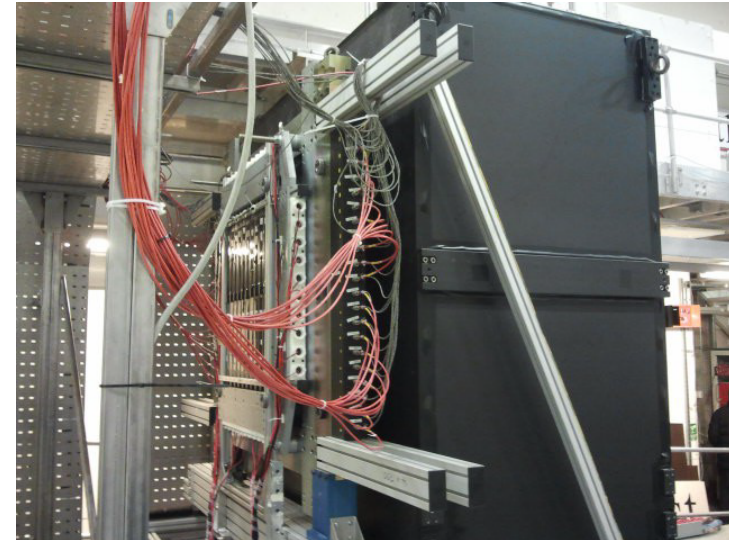


This procedure was tested in June 2014 run

KL



- Remaining hardware:
 - No expected changes
 - Support EMR, KL – remove iron feet **Orestano**
- Software: digitisation and data tuning nearly finished



Calibrations:

- KL pedestal stability with cosmics (trigger TOF2)
- Validate response of electrons, pions, muons

Orestano

Commissioning:

- No special commissioning
- Monitor pedestals and monitor gains through particle response

