H2020-MSCA-RISE-2015 – Grant Agreement
N° 690835

MUSE Scientific Board Meeting

WP6: status of the Deliverables

Anna Ferrari (HZDR)

Status of the Deliverables in WP6

D6.1 Irradiation tests (Month 35) delivered 30.11.2018

D6.2 SiPM characterization (Month 36) in preparation, it will be delivered in due time

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Deliverable D6.1 - WP6 - Due date: 30 November 2018

Title: **Irradiation tests for the Mu2e experiment**
Type: Report
Dissemination level: Public
WP number: 6
Lead Beneficiary: INFN

Delivered 30 November 2018

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Description:

This report describes, first, the irradiation campaigns carried out within the MUSE project to test radiation hardness of several components of the Mu2e electromagnetic calorimeter. The experimental activity was conducted at Frascati Neutron Generator at ENEA-Frascati, the CALLIOPE photon irradiation facility at the ENEA-Casaccia research centre and the ELBE high power radiation source at the Helmholtz-Zentrum Dresden-Rossendorf (HZDR). In addition, to prove that HPGe detectors can be used to monitor the muon stopping rate in the MU2E experiment, a HPGe detector was tested at ELBE with a pulsed gamma beam combined with radioactive sources. MUSE achieved therefore the goal to build an European network of experts in irradiation measurements, able to set future common activities.