

Subject: TIC meeting , May12, 2025 (SiPM radiation hardness; ePIC 2025 Survey Commitments), summary

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Dear Colleagues,

this e-mail is to underline the main outcomes of the May 12, 2025 TIC meeting dedicated to (i) SiPM radiation hardness; (ii) ePIC 2025 Survey Commitments.

Communications on May12:

- from TC-office

Update of the list of colleagues with writing privileges for the preTDR project in overleaf.

Reminder about the coming TIC meeting on May 19, which will be dedicated to preTDR open points.

(i) SiPM radiation hardness

SiPM radiation hardness has been studied by irradiation campaigns and thermal annealing exercises

with attention to the dark count rates.

All types of SiPMs foreseen in ePIC calorimeters have been studied.

The outcomes are being published, while detailed data are available in Zenodo.

PDE variations have not been checked so far and it has been suggested to measure also this parameter.

In the discussion following the presentation it has been put in evidence that further steps are needed to

apply these results to calorimetry performance in ePIC. Topics that have been mentioned:

use of comprehensive dose maps, simulation exercises considering different levels of thresholding, evaluation of PDE variations of the irradiated SiPMs,

data treatment options offered by the CALOROC architecture.

It has been estimated that about 2 months are needed for a step forward.

All this suggests a dedicated workfest at the Summer ePIC meeting in July 2025,

also taking advantage of the Calorimetry workshop at Oak Ridge in June and the

workshop dedicated to CALOROC scheduled at the beginning of June.

Calorimetry CC WG conveners are willing to take care of the organization.

(ii) ePIC 2025 Survey Commitments

Instructions to make use of the extract of the 2025 Survey Commitments distributed to DSLs

have been provided, including a live demonstration. It is clarified that the information is distributed to DSLs to make them aware of who they can contact in view of a more direct engagement in the DSCs. Table versions with some more details have been requested for a targeted action. This request will be evaluated in view of better helping the DSCs.

If these notes need corrections/integration, please, write me back.
Thank you.

Best greetings, Silvia

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