

Subject: TIC meeting 12/4 , 2023 (VTRx for MAPS; photon sensor update for Cherenkov devices) - main outcome

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Dear Colleagues,

Two different items have been addressed:
VTRx for MAPS; update about photon sensors for Cherenkov devices by MCP technique.
We thank the colleagues for the highly informative reports.

Main findings:

VTRx for MAPS

A rich and exhaustive report has illustrated the needs with proper description of the sensor layout in the vertex, barrel and disk trackers. In fact, the needs in term of transceivers results from the layout analysis.
Including spares at a 20-25% level, this results in: 2,000 VTRx+ and 230 lpGBT.

The PM is contacting CERN to have a confirmation about cost and to understand when the pigtail length should be communicated or if the VTRx can come without pigtail, which can be added later according to needs. Updates at the next TIC meeting.

photon sensors for Cherenkov devices by MCP technique

The progress in the production of the first HRPPDs has been communicated and no delay respect to the schedule presented 1 month ago is expected.
A plan for the qualification and characterization of these HRPPDs has been presented.
The main site will be BNL, with study in magnetic field at Argonne and ageing studies at INFN.

News about the planning for testing commercial MCP-PMTs have been provided.
The two producer options (Photek, Photonis) have been contacted to understand the potential delivery timeline.
Well defined timelines have been provided for completing the transportation of BABAR quartz bars to JLab
and for the disassembling of the first bars and their following qualification.

Action items:

HRPPDs: a written note illustrating the qualification and characterization procedure is requested.

It should address all the parameters in the purchasing specifications.

MCP-PMTs: inform TIC via e-mail about the production timelines when the information is available.

As usual, if this notes need corrections/integration, please, write me back.

Thank you.

Best greetings, Silvia

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