Subject: TIC meeting 10/30 (tracking risk mitigation plan), 2023 - main outcome

From: Silvia Dalla Torre <Silvia.DallaTorre@ts.infn.it>

Date: 11/3/2023, 4:16 PM

To: eic-projdet-tic-l@lists.bnl.gov, elke-caroline aschenauer <elke@bnl.gov>, Simon Gardner <simon.gardner@glasgow.ac.uk>, Nathaly Santiesteban <nathaly.santiesteban@unh.edu>, "Hartbrich, Oskar" <hartbricho@ornl.gov>, thomas ullrich <thomas.ullrich@bnl.gov>, Ernst Sichtermann <EPSichtermann@lbl.gov>, matt posik <posik@temple.edu>, Oleg Tsai <tsai@physics.ucla.edu>, "Landgraf, Jeffery M." <jml@bnl.gov>, Barbosa Fernando <barbosa@jlab.org>, "jhuang@bnl.gov" <jhuang@bnl.gov>

CC: Lajoie John < lajoie@iastate.edu>

Dear Colleagues,

about the TIC meeting on October 30, 2023, these are the points to underline:

- The mitigation plan, being developed in response of a main concern from the CD3A director review

and related to the development of the IT3 project, is at present a mere backup plane.

- For discussion two branch points are considered:
- ITS3 technology works with a timeline compatible with the EIC project timelines, but the EIC-LAS

(the modified version needed to cover the areas larger than the SVT ones) incurs delays that make its timeline incompatible with the EIC project timelines;

- ITS3 technology works but delays are incurred that make its timeline in ePIC incompatible with the EIC project timelines.
- In the first branch scenario, the large-surface Si trackers, namely the 2 outer barrel layers and the disks

are replaced by MPGDS, namely cylindrical MICROMEGAS and planar microR-WELL respectively.

- In the second branch scenario, SVT is replaced with IT2 sensors, as used in ALICE and sPHENIX.
- The need to add some overall timelines to the mitigation plan has been underlined.
- The global status of tracking simulation has been summarized. It includes: correcting a misconfigured readout segmentation, understood making use of the September simulation campaign,

improvements and corresponding implementation in the vertex reconstruction, and updates to the tracking reconstruction software also to take into account the recent upgrade of the ACTS package.

Best greetings, Silvia

Silvia DALLA TORRE

http://wwwusers.ts.infn.it/~dallator/SilviaDALLATORRE/

INFN - Sezione di Trieste
http://www.ts.infn.it
Via Valerio, 2
34127 Trieste ITALY

tel. +39.040.558 3360 - +39.040.375 6227 fax +39.040.558 3350 - +39.040.375 6258 e-mail: silvia.dallatorre@ts.infn.it

1 of 1 11/3/2023, 4:18 PM