

ePIC Far-Forward Meeting – Tuesday, January 24<sup>th</sup>, 2023

Present: Michael Murray, Yulia Furletova, Sakib Rahman, David Ruth, Yuji Goto, Eden Mautner, Alex Jentsch, Gary Penman, Lynn Wood, Jeetendra Gupta, Peter Steinberg, Zvi Citron, Nathaly Santiesteban, Po-Ju Lin

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- Sakib presented some results on further progress for the B0 tracking in ACTS.
  - Led to discussion of loosening the 0.1 micron “on surface” test required by ACTS to verify that the surface representation is a reasonable one. It fails pretty much every time, making ACTS unable to give us a track from the B0.
  - How much tolerance do we have for this for the reconstruction?
  - 1.0 micron is proposed as a first “new” value. This is still an aggressive value given the thickness of the sensor plane, so this is a good starting point to study how it affects the “on surface” requirement.
  - B0 hits now show up. It would be good to see hits for 1 event.
  - Sakib was having some trouble understanding inverse matrix function for ACTS.  
>>> He will check function with simple 3x3 matrix.
- David Ruth is starting work on a modern tracking algorithm for the Roman Pots.
- Michael commented that far backward group would like to talk with Far Forward about common technologies and also backgrounds. This meshes nicely with Alex’s work on backgrounds. He thinks that previous studies may have overestimated radiation load.
- Alex encouraged people to show their work in future meetings as a way of learning and getting started.
- Next meeting 10am EST, Tuesday 31<sup>st</sup> January 2023  
Submitted by Alex and Michael