

Bi-weekly IF03 Solid State Detectors and Trackers

30 July 2020

INDICO: <https://indico.fnal.gov/event/44596/>

Attendance: Tony Affolder (ATLAS tracking), Artur Apresyan (CMS timing), Abe Seiden (ATLAS tracking and R&D timing), Frank Golf (CMS pixel + timing), Marco Bregant (ITS, future upgrade IT), Ryan Heller (CMS timing + R&D LGAD), Simone Mazza (ATLAS timing, R&D timing), Simone Pagan Griso (ATLAS tracking, EF9 convener), Ted Liu (CMS timing). Suzanne Kuehn (ATLAS pixels), Nicolas Fourches (CMOS/Mimosa??), Ilya, Cristian Pena, Sxie@fnal.gov, Lucie Linssen (R&D on pixel tracker/granular calorimetry-CLIC/CMS), Ariel Schwartzman

Sorry for the spam but I cannot find the password for zoom, it's not on indico.

Can it be posted here? 762102. Sorry about that. FNAL policy is to not post zoom passwords on Indico.

Introduction- Artur, Lucie, tony

- Would like to cover requirements/potential performance of trackers; connections to experimental design/performance, physics requirements
 - How close to the interaction point can you get?
- Unless it is Micropattern gas detectors, trackers is covered here within Snowmass
- Next meeting is August 13th.

Timing Detectors- Abe

- . Is it possible to flat gain vs bias to make sensors/modules larger? Would be a good research path. Or any path that make larger sensors possible.
- What is the pro/con of 3d vs LGAD?
 - Channel count is in favor of LGAD
 - 3d may be radiation hard
- How does occupancy feed into design? Will be easier at larger radius.
 - Does the EF groups have mapped of occupancy vs radius for different colliders?

Discussion of future topics for next meetings

- BRN overview from Tracking group (when report is public)
- 3d devices
- Timing from crystals plus SPMT (CMS barrel)

AOB

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