



General Items

Presented at the ATHENA Jets/Heavy Flavor/Electroweak BSM WG Meeting

Miguel Arratia (UC-Riverside), Brian Page (BNL),
Ernst Sichtermann (LBNL), Stephen Sekula (SMU)

June 15, 2021

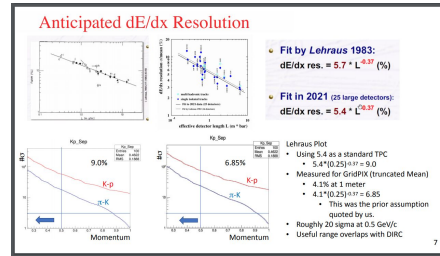


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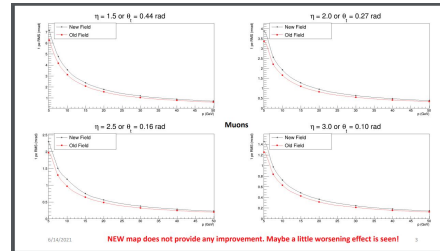


PID Items

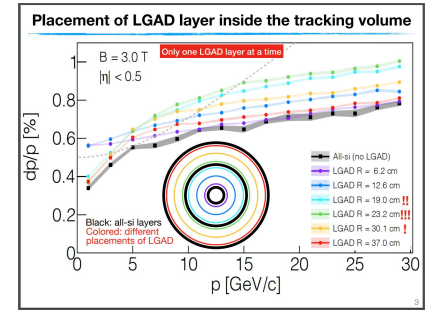
- Emphasis this week in [PID WG meeting](#) on particle ID in high-B-field environment and for tracks with low momentum.
- Performance of possible technology ideas (e.g. GridPix, Time-of-Flight via LGAD) under study -> complement and overlap DIRC in barrel.
- Investigation of effect of new 3T B-field map on forward RICH performance suggests new map has no particularly strong effect, with perhaps a slight worsening of the resolution.
- A look at an imaging calorimeter based on monolithic silicon sensors. Question raised about streaming capability of such a device.



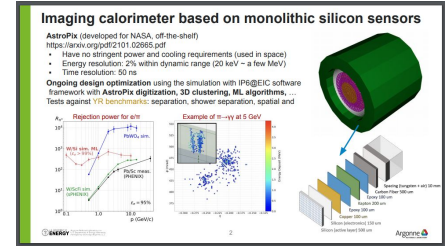
“Low momentum PID at High B-field with GridPix” (P. Garg)



“B field impact on forward RICH performance” (C. Chatterjee)



“Effect of LGAD (extra material) Inside all-si tracker barrel” (W. Fan)

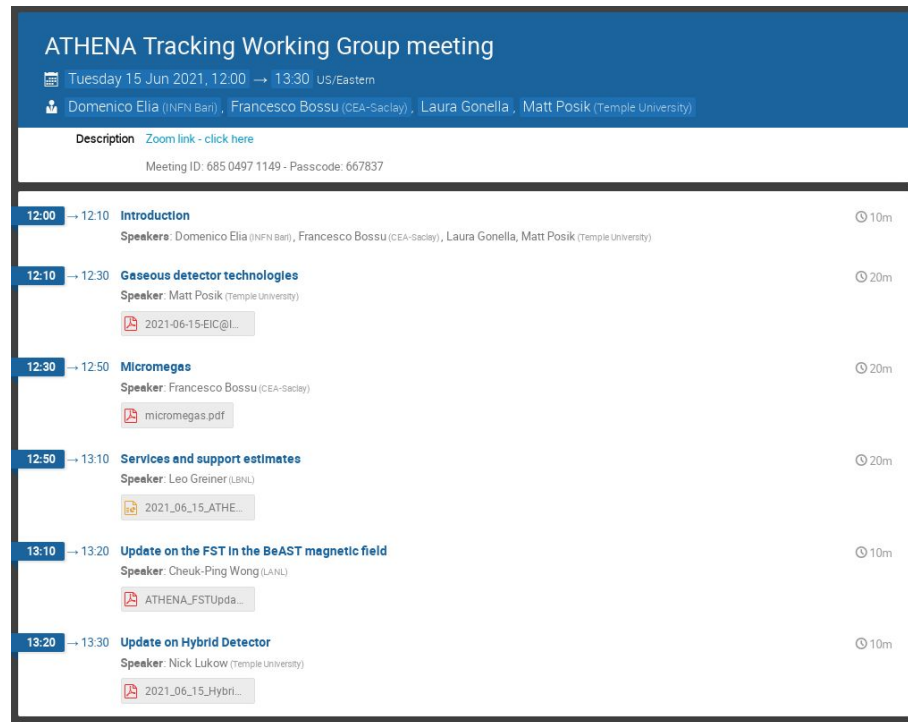


“Imaging Calorimetry for EM Barrel with ToF” (M. Zurek and P. Reimer)

Tracking and Calorimetry

Since [Tracking Meeting](#) just ended, no lengthy summary here.

We'll have a report from Miguel today on the HCAL issues. J. Adam summarized in the [Calorimeter WG](#) meeting yesterday the history of hadron calorimeter modeling in GEANT from ZEUS to the EIC.



ATHENA Tracking Working Group meeting
Tuesday 15 Jun 2021, 12:00 → 13:30 US/Eastern
Domenico Elia (INFN Bari), Francesco Bossu (CEA-Saclay), Laura Gonella, Matt Posik (Temple University)

Description [Zoom link - click here](#)
Meeting ID: 685 0497 1149 - Passcode: 667837

Time	Topic	Speaker	Duration
12:00 → 12:10	Introduction	Speakers: Domenico Elia (INFN Bari), Francesco Bossu (CEA-Saclay), Laura Gonella, Matt Posik (Temple University)	10m
12:10 → 12:30	Gaseous detector technologies	Speaker: Matt Posik (Temple University) 2021-06-15-EIC@L...	20m
12:30 → 12:50	Micromegas	Speaker: Francesco Bossu (CEA-Saclay) micromegas.pdf	20m
12:50 → 13:10	Services and support estimates	Speaker: Leo Greiner (LBL) 2021_06_15_ATH...	20m
13:10 → 13:20	Update on the FST in the BeAST magnetic field	Speaker: Cheuk-Ping Wong (LBNL) ATHENA_FSTUpda...	10m
13:20 → 13:30	Update on Hybrid Detector	Speaker: Nick Lukow (Temple University) 2021_06_15_Hybr...	10m