Perspective on DOE CD-2/3A

- Priority is to secure CD-2/3A, Project Performance Baseline/Long Lead Procurement (LLP), at the earliest achievable date that funding permits
 - Enables a more secure funding plan
 - LLP authority improves overall schedule and supply chain risks
 - Optimum alignment with conclusion of RHIC OPS and ONP redirection plans
 - · Promotes engagement of users, international partners, NSF, and DOE.
- Funding increase in FY2023 is essential for timely CD-2/3A
 - Increase pace of technical progress and restore momentum lost after CD-1
 - Increase design maturity and viability of CD-2/3A goals
 - Improve accuracy of cost and schedule uncertainty estimates, reduce risk
 - Bolster stakeholder confidence in EIC construction schedules
 - Strengthen partner engagement and secure commitments
- DOE CD-2/3A reviews will be requested when ready, following:
 - Preliminary Design Review assessment of design maturity and technical risk
 - "Director's Review" comprehensive assessment of mgmt., TPC, CD-4, etc.
 - DOE Federal Project Director assessment of readiness to proceed

Slides from Elke/Rolf

Latest News

From DOE/NP:

"... with the passage of the Inflation Reduction Act (IRA), the Office of Nuclear Physics anticipates providing an additional \$10 million OPC and \$100 million TEC of FY 2022 funds for the Electron-Ion Collider project."

(RE/ECA note: This is separate from possible FY23 funding that is still in congressional appropriations phase.)

From Jim Yeck:

"There is an important phase change in the EIC project underway as a consequence of the Inflation Reduction Act (IRA) and the DOE plan to provide significant IRA funding to the EIC project."

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"Our short-term objective is to secure CD-2/3a at the earliest possible date and we are fortunate that DOE will provide the funds we require through both IRA funding and the traditional annual appropriations process. We will work with DOE and our partners to secure CD-2/3a approval in early calendar 2024."

High-Level Message: DOE funding to ensure CD-2/3A timeline seems secured.

From Jim Yeck's slides at recent EICUG Meeting

CD-2/3A Planning Dates

DOE OPA Status Review (Remote)

October 19-21, 2021(A)

Funding Discussion at DOE ONP (In-Person)

April 26, 2022 (A)

FPD Status Update at BNL (Hybrid)

June 28, 29, 30 2022

Cost and Schedule Scrutiny Meetings

July - August 2022

Project Detector Meetings

Fall 2022

DOE OPA Status Review - Confirm CD-2/3A Plans

January 2023

Preliminary Design and Director's Reviews

June 2023

DOE CD 2/3A OPA Review and ICR

October 2023

DOE CD 2/3A ESAAB Approval

January 2024

FY22 Report

- Detector layout
 - Far-forward detectors (Alex Jentsch)
 - TOF (Constantin/Frank/Wei/Zhenyu)

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- Sensor
 - BNL sensor production (Alessandro/Gabriele)
 - BNL sensor test beam results (Artur/Chris/Zhenyu)

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- ASIC
 - EICROC0 (Carlos/Christophe)
 - HpSOC (Bruce/Luca)
 - FCFD0 (Artur/Tom)

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FY23 Planning

- Sensor production
 - BNL IO
 - One with HPK/FBK?
- ASIC
 - EICROC1, HpSoC1, FCFD1
- Test
 - New BNL sensor: lab and beam tests (January 2023 at FTBF)
 - HPK sensors: lab and beam tests (May 2023 at FTBF)
 - ASICs: lab and beam tests
- Flex, on/off-detector electronics

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Mechanical structure and cooling

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FY22 Report and FY23 Proposal

- Prepare to present R&D progress in our meetings by September 14 and summarize this progress in the overleaf project [1].
- On the same timeline, indicate where you / your institution can contribute to FY23 project R&D, including timelines and resource needs.
- We will set priorities, split the single document into two, one for eRD112 and the other for eRD109 on ASIC/electronics by **September 21**, and use the remaining time before Oct 1 for further discussions and editing of the documents.
- [1] To view the overleaf project https://www.overleaf.com/read/bbfkzvfbzxyr
 To edit the overleaf project, please email me your overleaf account.