

# Generic Detector R&D for an Electron Ion Collider

## 8th Advisory Committee Meeting January 22-23, 2015

*Thomas Ullrich (BNL)*  
January 22, 2015



# EIC R&D Advisory Committee

---

## Standing Advisory Committee:

Marcel Demarteau\* (Argonne)

Carl Haber (LBNL)

Peter Krizan (Ljubljana)

Ian Shipsey (Purdue)

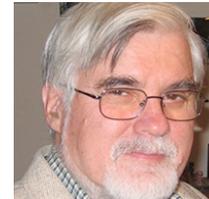
Rick Van Berg (UPenn)

Jerry Va'vra (SLAC)

Glenn Young (JLab)

\*chair

- Robert Klanner (DESY) retired from committee
- Peter Krizan (Ljubljana) joined the committee



# Charge to Committee

---

- Review of ongoing projects
- Additional charge to assess R&D program as a whole:
  - ▶ What is your overall assessment of the program?
  - ▶ How successful you believe some of the R&D has been?
  - ▶ What do you see as the return on the investment made?
  - ▶ What can be done to improve the program?

# News and Status

---

- Call for proposals only once a year “aligned” with FY
  - ▶ Winter: Progress Reviews
  - ▶ Summer: New Proposals and Progress Reviews
  - ▶ October: Start of new funding cycle
- Proposals can apply only for 1 FY funding
  - ▶ Follow-up proposals encouraged
  - ▶ Mandatory for postdoc funding (not automatic)
- Transition to “shorter” Projects IDs

# News and Status

---

- Call for proposals only once a year “aligned” with FY
  - ▶ Winter: Progress Reviews
  - ▶ Summer: New Proposals and Progress Reviews
  - ▶ October: Start of new funding cycle
- Proposals can apply only for 1 FY funding
  - ▶ Follow-up proposals encouraged
  - ▶ Mandatory for postdoc funding (not automatic)
- Transition to “shorter” Projects IDs
  
- Transition FY14/15 was bumpy due to backlogs at BNL
- Please stay in close contact with Xiaofeng Guo

# Ongoing EIC Detector R&D: FY2015

New ID	Contact	Title	Institutions
eRD11	Yi Qiang	RICH detector for the EIC'S forward region particle identification	Argonne National Lab, Brookhaven National Lab, Georgia State University, INFN - Sezione di Ferrara, Jefferson Lab, Los Alamos National Lab, Old Dominion University, University of New Mexico, Universidad Tecnica Federico Santa Maria
eRD10	Mickey Chiu	R&D Proposal for (Sub) 10 Picosecond Timing Detectors at the EIC	Argonne National Laboratory, Brookhaven National Laboratory, Howard University, University of Illinois at Urbana-Champaign, University of Massachusetts at Amherst, Yale University
eRD4	Pavel Nadel-Turonski	DIRCbased PID for the EIC Central Detector	University of South Carolina, GSI, The Catholic University of America, Old Dominion University, Thomas Jefferson National Accelerator Facility
eRD3	Bernd Surrow	Design and assembly of fast and lightweight barrel and forward tracking prototype systems for an EIC	CEA Saclay, Temple University, College of Science and Technology
eRD2	Abhay Deshpande	A Compact Magnetic Field Cloaking Device	RIKEN BNL Research Center, Stony Brook University, RIKEN, Brookhaven National Laboratory, Seoul National University
eRD1	Huan Huang/ Craig Woody	June 2014 Status Report and Proposal For EIC Calorimeter Development	Brookhaven National Laboratory, California Institute of Technology, The Catholic University of America, Thomas Jefferson National Accelerator Facility, Indiana University, IPN Orsay, Pennsylvania State University, Texas A&M University, University of California at Los Angeles, University of Science and Technology of China, Yerevan Physics Institute
eRD6	Klaus Dehmelt	RD6 Tracking/PID Consortium: Progress Report & Funding Request	Brookhaven National Lab, Florida Tech, Lawrence Livermore National Lab, Stony Brook University, University of Virginia, Weizmann Institute of Science, Yale University
eRD12	Elke Aschenauer	Progress report for Proposal for an electron polarimeter a luminosity monitor and a low Q2 tagger	Brookhaven National Laboratory, Byelorussian State University, Cracow University of Technology

# EIC - Status and Future

---

- QCD Town-Meeting at Temple U. in September '14
  - ▶ Hadron Physics and Heavy Ion Physics community
  - ▶ Joint recommendation for EIC as highest priority for new construction

## **Recommendation:**

A high luminosity, high-energy polarized Electron Ion Collider (EIC) is the U.S. QCD community's highest priority for future construction.

- LRP resolution meeting April 16-20, Kitty Hawk, NC
  - ▶ Decision on EIC
  - ▶ Will have impact on Detector R&D program

# Budgets and FY16

---

FY11	\$528,016
FY12	\$1,183,179
FY13	\$798,878
FY14	\$1,416,386
FY15	\$1,113,500

No information on FY16 level yet

Call for new proposals (FY16 funding) in Spring 2015  
Announcement will be circulated widely as usual