

EIC Resource Review Board (RRB) Meeting Minutes

April 3-4, 2023 at Stony Brook University

Hosts:

Haiyan Gao, Co-Chair, Associate Laboratory Director, Nuclear and Particle Physics, BNL
David Dean, Deputy Director for Science, TJNAF
Diego Bettoni, Co-Chair, Vice President, INFN
Abhay Deshpande, EIC Science Director, BNL/SBU
Jim Yeck, EIC Project Director, Associate Laboratory Director, BNL

EIC RRB Members:

Diego Bettoni, Co-Chair, Vice President, INFN
Grahme Blaire, STFC, United Kingdom
Marcella Grasso, IN2P3/CNRS, France
Tim Hallman, Associate Director of the Office of Science for Nuclear Physics, DOE
Jenny Hiscock, STFC, United Kingdom (Remote)*
Arnaud Lucotte, IN2P3/CNRS, France
Yong Kun Moon, Ministry of Science and ICT, South Korea
Franck Sabatie, CEA Saclay, France
Claire Samson, Canada Foundation for Innovation, Canada
Marek Vyřinka, Ministry of Education, Youth and Sports, Czech Republic

EIC RRB Observers:

Pietro Antonioli, INFN Bologna, Italy
Jaroslav Bielčık, Czech Technical University, Prague, Czech Republic
Carlos Munoz Camacho, IJCLab, France
Yuji Goto, RIKEN, Japan
Taku Gunji, Center for Nuclear Study, University of Tokyo, Japan
Garth Huber, University of Regina, Canada
Pete Jones, iThemba Labs, South Africa
Peter Jones, University of Birmingham, United Kingdom
Oumar Ka, Cheikh Anta Diop University, Senegal (Remote)
Ana Amelia Machado, UNICAMP, Brazil (Remote)
Bedanga Mohanty, NISER, India (Remote)
Clifford Nxomani, National Research Foundation, South Africa
Rosario Nania, INFN, Italy
Yongseok Oh, Kyungpook National University, South Korea
Yi Yang, National Cheng Kung University, Taiwan

EIC Project, BNL & TJNAF Participants:

Luisella Lari, EIC Project Manager, BNL
Maria Chamizo Llatas, EIC In-Kind Manager, and Deputy Associate Lab Director/NPP, BNL
Allison Lung, Deputy Project Director for TJNAF Partnership, TJNAF
Elke Aschenauer, Co-Associate Director for the Experimental Program
Rolf Ent, Co-Associate Director for the Experimental Program

U.S. Department of Energy Participants:

Corey Cohn, DOE Office of Science

Michael Famiano, DOE Office of Science for Nuclear Physics

Paul Mantica, DOE Office of Science for Nuclear Physics

Other attendants:

Jack Anderson (BNL, Deputy Director for Operations)

Silvia Dalla Torre (INFN Trieste, ePIC deputy spokesperson, presenter)

Markus Diefenthaler (TJNAF, presenter)

Stuart Henderson (TJNAF, presenter)

Ed Kinney (University of Colorado at Boulder, presenter)

John Lajoie (Iowa State, ePIC spokesperson)

Maria Zurek (ANL, presenter)

Kyungseon Joo (Univ. of Connecticut)

Amber Boehnlein* (JLab)

Eric Lancon* (BNL)

(* attended on Zoom for part of the meeting)

Abhay Deshpande (EIC Science Director, Stuart Henderson (TJNAF Director), Jack Anderson (BNL Deputy Director for Operations), and Haiyan Gao (RRB Co-Chair) welcomed the participants and thanked them for attending the first EIC RRB Meeting.

Co-Chair, Haiyan Gao, presented the EIC RRB Board mandate and draft charter. Haiyan Gao and David Dean will alternate as the US Co-Chair for the RRB with Haiyan starting first. Diego Bettoni from INFN will serve as the international Co-Chair. Feedback from the participants on the charter was incorporated into a final draft for RRB member approval. Stuart Henderson provided a status report on the EIC Advisory Board. There has been significant progress on defining accelerator collaborations and in-kind contributions from domestic and international partners. A high-level EIC science overview was provided by Maria Zurek (ANL) which was followed by an interactive Q&A.

EIC Project Director, Jim Yeck, presented an update on the EIC project plan. The EIC is a DOE project and fully international in character. The Project is currently working towards Critical Decision (CD) 3A Long Lead Procurement planned for January 2024. This was made feasible by the Inflation Reduction Act funding of \$138M provided in September 2022. EIC remains on a technically driven schedule. The plan is to achieve CD2/3 in April 2025 before RHIC concludes operations in June 2025. Significant RHIC Operations funding will be redirected to EIC construction starting in FY2025 and reaching ~\$150M/year in FY2026. There is strong support from DOE for this plan.

Other presentations included:

- ePIC Collaboration Status and Plans for New Members- Silvia Dalla Torre (ePIC Spokesperson)
- EIC Project Detector Overview- Elke Aschenauer (Co-Associate Director for the Experimental Program) – this talk integrated the ePIC technical coordination and resource coordination.
- Detector Advisory Committee (DAC) Report- Edward Kinney (DAC Chair)
- ePIC Computing Plan- Markus Diefenthaler (ePIC Computing Coordinator)

The afternoon session was dedicated to an open roundtable discussion where the funding agencies representatives and observers were invited to give an update on their plans for participation in the EIC. The following countries were represented as members:

- Canada
- Czech Republic
- France
- India
- Italy
- South Korea
- United Kingdom
- United States

The following countries were represented as observers:

- Brazil
- Japan
- Senegal
- South Africa
- Taiwan

The final version of the RRB charter was unanimously approved by all voting members following another round of discussion in the afternoon.

The RRB will meet nominally every 6 months. It was agreed that the next will take place the first week in December 2023 in Washington, DC. The following meeting in April 2024 is tentatively planned to take place in Europe.

Topics of discussion for the next meeting will include:

- Common Funds
- Computing
- Set up various agreements
- Governance: US CD processes; Change Control Management; Scope changes
- Quality assurance (In-kind)

Action Items:

- Tim Hallman, Office of Nuclear Physics, to provide talking points to international funding agencies on how DOE (EIC) is addressing environmental sustainability, DEI, and human resources.
- Jim Yeck, EIC Project Director, will provide a “PoP” needed for the detector and accelerator