

Collider-Accelerator Department
Machine Advisory Committee Meeting (C-AD MAC-18)

7 – 10 December 2021
Zoom Remote

Charge

The Collider-Accelerator Department (C-AD) has completed the three-year precision beam energy scan program (BES II) at RHIC with the fully operational use of Low Energy RHIC electron Cooling (LEReC). RHIC will now have the final Run with polarized protons at the highest energy, and then transition to a 3-year operation period with STAR and the new sPHENIX detector. After completion of the RHIC program there will be transitions to Electron Ion Collider (EIC) construction, commissioning, and operation.

During this year's MAC we request the committee's review and advice on (i) the operation with sPHENIX, (ii) the presented R&D initiatives, and (iii) proposed accelerator application projects.

For each item, please address the following charge questions:

- a) Are the technical goals realistic and is the progress appropriate to meet the stated goals?
- b) Are there any technical issues that were missed and/or need additional attention by the team?
- c) Is the accelerator R&D effort well executed and future work well planned?

Any other comments on the C-AD accelerator operation, R&D and proposed accelerator application projects are welcome.

It is requested that a concise report responsive to this charge be forwarded to the C-AD Chair, Wolfram Fischer, by December 23, 2021.