

Collider-Accelerator Department
Machine Advisory Committee Meeting (C-AD MAC-21)

16 – 18 December 2024
Hybrid

Charge

After 24 years of RHIC operation, the Collider-Accelerator Department (C-AD) is preparing for the final RHIC Run with the new sPHENIX and the upgraded STAR detectors in FY 2025 (ending 30 Sep 2025), with a possible extension into FY 2026. After completion of the RHIC physics programs, C-AD will assume responsibility for removal of equipment not needed for the EIC from the RHIC tunnel and experimental halls, will maintain the hadron accelerator complex in a ready state and will continue R&D in accelerator science and technology.

During this year's MAC we request the committee's review and advice on (i) the operation with sPHENIX and STAR in the final Run-25, (ii) the plans for maintaining and upgrading the hadron injector complex over the next decade for EIC, and (iii) the presented R&D efforts.

For items (i) and (ii), please address the following charge questions:

- a) Are the technical goals realistic to meet the stated goals?
- b) Are there any technical issues that were missed or need additional attention?

For item (iii), please address, in addition, the following charge question:

- c) Is the accelerator R&D effort well executed and future work well planned?

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

It is requested that a concise report responsive to this charge be forwarded to the C-AD Chair, Wolfram Fischer, by 3 January 2025.