

Collider –Accelerator Department LEReC Laser Review

November 8 – 9, 2018
Large Conference Room, Bldg. 911B

Charge

The Collider-Accelerator Department is developing electron cooling in RHIC as part of the second Beam Energy Scan (BES II). In this review, we request the committee's evaluation and advice on the high-power laser used for electron beam generation and its integration for the Low Energy RHIC Electron Cooling project, which is needed for BES II operation. This laser must operate continuously for months, and within tight tolerances for laser power, laser beam position and laser pulse shape, to allow for electron beam cooling commissioning and operation.

Please address the following charge questions:

- (a) Are there any technical issues that were missed and/or need additional attention?
- (b) Are the technical goals realistic and is the progress appropriate to meet the stated goals?
- (c) Is the staffing plan sufficient for 24/7 beam operations support?

It is requested that a concise report responsive to this charge be forwarded to the Accelerator Division Head, Wolfram Fischer, by November 30, 2018.