

DATE: October 23, 2001

TO: RHIC E-Coolers

FROM: Ady Hershcovitch

SUBJECT: **Minutes of the October 12, 2001 Meeting**

Memo

Present: Ilan Ben-Zvi, Michael Harrison, Ady Hershcovitch, Jorg Kewisch, Derek Lowenstein, William MacKay, Satoshi Ozaki, Fulvia Pilat, Jie Wei.

Topics discussed: Funding, Experimental Space, Magnets, RF Cavities, Cheaper Components, Electron Gun Cooling, Meeting Secretary.

Funding: decision was made to assist Advanced Energy Systems (AES) obtain SBIR phase II funding. Possibility of LDRD funds was discussed; prospects are not bright, partly due to LDRD funds committed to ongoing projects.

Experimental Space: Jorg showed diagrams of building 939 and of the experimental setup. The experimental setup will fit in the hall of the building with some room to spare.

Magnets: FNL has permanent magnet quadrupoles and dipoles that are suitable for the experiment. Mike plans to contact FNL and offer to trade them for ion pumps (that were never used; no future use at BNL is foreseen).

RF Cavities: Mike reported that DESY had agreed to build us RF cavities during FY02 to be paid for in FY03. Derek suggested that Mike (Brennan?) examine the specs.

Cheaper Components: Ilan reported that Boeing terminated its FEL project, which is now for sale. Ilan suggested that we should try and bid for components that useful to the RHIC E-Cooler like photo-cathodes and beam dump.

Electron Gun Cooling: the issue of electron gun cooling has, in principle, been resolved. Heat deposition at the hottest spot is 390 W/cm^2 (for 15 MV/m). Ilan spoke to Northrop Grumman; a determination was made to aim for a design with a cooling capability of 500 W/cm^2 .

Meeting Secretary: Satoshi suggested documenting meeting discussions. Ady volunteered to write up the "minutes" of future meetings. My apology for inaccuracies (this one was done from memory).