

*DATE:* December 28, 2007

*TO:* RHIC E-Coolers

*FROM:* Ady Hershcovitch

*SUBJECT:* **Minutes of the December 28, 2007 Meeting**

## Memo

Present: Ilan Ben-Zvi, Peter Cameron, Wolfram Fischer, Harald Hahn, Ady Hershcovitch, Dmitry Kayran, Jorg Kewisch, Vladimir Litvinenko, Eduard Pozdeyev, Thomas Roser, Dejan Trbojevic.

Topics discussed: Mostly Low Energy Cooling

**Mostly Low Energy Cooling:** It was a short meeting, in which Thomas initiated a discussion on low energy cooling. Ilan reported that Alexei Fedotov, who is presently on vacation, has been studying various machine physics issues that affect low energy cooling. Thomas commented that a plan and a cost estimate are needed for low energy cooling. Ilan said that two scenarios are being examined: DC and RF systems. The first involves a DC electron beam injector (like the one at FNL), which is a Pelletron with energy recovery. The cooling section will be 20 meters or less. It may be possible to move that system to BNL. That possibility will require construction of a new building and beam lines to RHIC. The FNL Pelletron is capable of delivering electron beam in the energy range of 0.8 MeV to 8 MeV. The second scenario involves the use of RF acceleration of an electron beam generated by the RF superconducting electron gun presently under development for the ERL. Cost estimates of the two scenarios will be presented at the machine advisory committee scheduled for February 11 – 13, 2008.

In response to Thomas' question regarding progress in other areas, Harald reported on the status of the 56 MHz superconducting cavity, and Ady reported receiving a reasonably priced estimated from CPI for the ERL beam dump (with ASME equivalence).