

REPORT ON THE EXPERIMENTS MADE AT CRYRING

4-8 September 1995

Participants: *From MSL* Mainly K.G. Rensfelt and H. Danared plus many Accelerator Staff experts
From TSL D. Reistad and co-workers
From CERN M. Chanel, G. Tranquille and J. Bosser

1. Aim of the Experiments

The main goal was to measure the lifetime of Pb^{52+} , Pb^{53+} , Pb^{54+} ions and occasionally of Pb^{51+} , Pb^{55+} . CERN wanted to check if the measurement made on LEAR during the experiments performed in June 1995 (cf. PS/AR/Note 95-12) could be reproduced at CRYRING.

2. Results of the CRYRING Experiments

During the first three days, the main effort was devoted to the CRYISIS ion source and to the settings of the injection line.

It was proved that the ion charges requested can be obtained from the source.

Adjustments of the injection line were performed without substantial difficulties. However, no lead ions were injected into the ring.

On Thursday 7 September a severe breakdown of the CRYISIS source liquefier lead to the definitive halt to the experiments since the necessary repairs would amount to several days.

In conclusion, we could not make any of the foreseen lifetime measurements.

3. Future Experiment Schedule

It has been decided that up until March 96 CRYRING lab. will try to find some machine time in order to set up the full machines for the purpose of our measurements, possibly including the lifetime measurements. Once these set-ups have been performed, CERN will delegate experts to carry out lifetime measurements.

If the lifetime measurements are successful, CERN will ask for at least two additional (but not consecutive) weeks for the purpose of cooling time measurements, which will certainly take place from April until the end of 1996. In this frame, technical discussions are underway between the two parties.

J. Bosser

Distribution

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