

**PAF meeting**  
**Monday 14, August 2006**

**Present:** A. Ceccucci, R. Garoby, R. Ostojic, W. Scandale, E. Shaposhnikova

*Notes by A. Ceccucci*

1) E-Cloud Instabilities

A presentation was given by Giovanni Rumolo on electron-cloud instabilities as a function of injection energy into the SPS. These instabilities grow with the injection energy and in order to exploit the benefits of higher injection energy (e.g., smaller space charge and smaller transverse emittance) a solution is necessary. A plausible solution is a smaller vacuum chamber with bake-out jackets. Simulation studies, and possibly experiments, shall continue on this item.

2) Long Term Plan (LTP)

Roland showed a detailed spread-sheet with the financial input provided for the preparation of the Long Term Plan that I understand the DG will present to the Council in October. Incidentally, here I have a question to John: what has been eventually included in the LTP from the POFPA side?

3) Questions to POFPA:

- PAF is impressed by the discovery potential of the LHC: 5 fb-1 to assess the existence of the SM Higgs in the range between 115 and 1000 GeV. 10 fb-1 to explore gluinos up to 2.5 TeV. If the potential for discovery is so large already for small integrated luminosity, why is the emphasis on further upgrades of the Luminosity so strong?
- What is the future of the low luminosity LHC experiments. PAF members were surprised to see a long term strategy for LHCb/ALICE outlined in the POFPA document because once the luminosity of the LHC will rise above nominal ( $10^{34}$ ) the simultaneous operation of ATLAS/ CMS with LHCb/ALICE becomes incompatible.
- The lifetime of the inner trackers for ATLAS and CMS is stated to survive a maximum of 300 fb-1. Is this supposed to be 10 years of operation at  $L=10^{34}$  cm-2 s-1 With  $3 \cdot 10^6$  s/y? These figures seemed modest to PAF members.
- What is the intended use of the East Hall in the PS2 era? Is slow extraction necessary in the East Hall?
- What is foreseen concerning the maintenance of the AD complex?

4) AOB

We were informed of a "Pipetron" workshop to take place in October [<http://amt.web.cern.ch/amt/events/workshops/LER2006/LER%20home%20page.html>].

The pipetron is a alternative LHC injector to be housed in the LHC tunnel.