B. Parker Hamburg, 29.05.97

Notes from Luminosity upgrade meeting of 23 May 1997

Participants: R. Bacher, D. Barber, W. Bartel, M. Berglund, R. Felst, B. Holzer, H. Lierl, F. Löffler, B. Löhr, E. Lohrmann, G. Lopez, C. Lüttge, I. Muschick, B. Parker, U. Schneekloth, K. Sinram, F. Willeke, S. Wipf, G. Wöbke, G. Wolf, K. Zapfe-Düren / Sec

1. U. Schneekloth reported on a problem due to synchrotron radiation from the quadrupoles QI and QJ which are upstream of the first separator magnets. A large tail of 10^{16} γs/sec would hit the anti-backsatter collimator at 0.8 m if nothing were done. Possible solution include:
   - Enlarging the central beam pipe
   - Installing an upstream collimator to catch this tail
   - Chänging the backsatter collimator geometry by adding a notch to convert it to a „keyhole configuration"
   - Coat inner surface of central beam pipe with a high-Z material.

   [9 viewgraphs]

2. G. Lopez reported on possibilities for:
   - e- and p-beam position monitoring
   - Synchrotron radiation position monitoring

   [2 viewgraphs]

3. W. Bartel reported that a transverse displacement of the IP within the H1 experiment, while painful, is not a show stopper.

   [1 viewgraph]

4. E. Lohrmann looked into the question as to what the proper electron energy is to maximize the physics potential of HERA ep collisions and concluded that the present 27.5 GeV is about optimal.

   [6 viewgraphs]

5. B. Parker reminded everyone of the world wide web reference to find future Luminosity Increase Working Group information, http://www.desy.de/~parker/

   [1 viewgraph]