

Draft Recommendations of the 57th Meeting of the PRC at DESY (27-28.5.2004)
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HERMES

The PRC congratulates the Collaboration for the results presented and for the numerous publications and contributions to conferences. The PRC takes note that Hermes is running with more than 95% efficiency but that data taking beyond summer 2004 will be required to accumulate the six millions DIS events with the transversely polarised proton target. The PRC takes note of the decision by HERMES to move the Recoil Detector installation to summer 2005; this allows for a very realistic commissioning scenario. The PRC expects for the next meeting a detailed plan for commissioning, calibration and alignment of the Recoil Detector as well as for the on-line and off-line software.

The PRC takes note that the Collaboration considers the switch to electrons in summer 2004, and a switch back to positrons by summer 2006 optimal for the HERMES physics program.

TeslaR&D: CALICE

The PRC congratulates the Collaboration for the very good progress achieved in hardware and in reconstruction software. The Ecal prototype will be ready by the end of 2004. The PRC acknowledges that the collaboration has good momentum and should continue the program with the presented schedule and test beams: assuming a start of Linear Collider construction in 2009, it is important and timely to schedule tests with electrons and hadrons beams in 2004 and 2005. The PRC looks forward to a detailed program for these tests. The PRC observes that there is some duplication of efforts on the RPC for the Hadron Calorimeter and encourages the groups to combine the efforts and to share responsibilities in equipping the one cubic meter prototype by 2005. The PRC takes note of the extension of the program towards the study of a tail catcher and a muon system.

The PRC asks the Collaboration to present a status report in autumn 2005.

HERA

The PRC congratulates the HERA team for the success in the operation of the machine and for starting to deliver important integrated luminosity to the experiments with polarized positrons. The PRC acknowledges the enormous effort invested for bringing HERA to the present level. The improvement in the luminosity is a complex problem that requires to increase the reliability of the machine. The PRC takes note that the present level of polarization and the specific luminosity is somewhat smaller than foreseen.

H1

The PRC congratulates the Collaboration for the progress in running, for the results presented - including first physics results from HeraII data - and for the numerous publications and contributions to conferences. The PRC takes note that the VFPS (Very Forward Proton Spectrometer) is starting to take data, and that the FTT (Fast Track Trigger) has produced first results. The PRC takes note that 50% of the FST (Forward Silicon Tracker) is not operational because of radiation damage, and that the collaboration is looking into the planning of its repair, which could cause an increase in the length of the summer shutdown. The PRC takes note that the Collaboration wishes to at least double the accumulated luminosity with respect to Run I (i.e. 100 - 200/pb) during 2004 and therefore strongly prefers to continue with positrons after the summer 2004 shutdown.

POL2000

The PRC congratulates the polarisation team for the results shown on the polarisation measurement. The PRC takes note that the new calorimeter for Lpol will be constructed by members of the H1 Collaboration before the end of 2004. The PRC takes note that the laser controller of the Cavity Lpol has been damaged by radiation and that new shielding has been designed and will be installed during the next shutdown. The PRC re-iterates the importance of a fast commissioning of the new Lpol also needed for a faster optimization of the polarization.

HERA-B

The PRC congratulates the Collaboration for the results presented and for their continuing analysis effort. The PRC takes note of the significant progress in data analysis and of the wish of the Collaboration to finalize the analyses and publish the major topics by end of 2004. Analysis activities will have finished by end 2005. The PRC re-iterates the importance of completing the study of the A-dependence of J/ψ production.

ZEUS

The PRC congratulates the Collaboration for the progress in running, for the results presented - including first physics results from HeraII data - and for the numerous publications and contributions to conferences. The PRC takes note that the 6-meters tagger has been reinstalled and that the luminosity measurement has achieved a 2% precision in spite of the radiation damage of the electron spectrometer. The PRC takes note that the MVD (Micro Vertex Detector) is working very well in spite of the accumulated radiation and of a major proton beam accident. The PRC takes note that the STT (Straw Tube Tracker) has been stable since December with only 3 out of 48 sectors out. The PRC express concern that the size of the Collaboration is reduced by ~30%. The PRC takes note that the Collaboration strongly favors the directorate's decision to switch to electrons in summer 04.

Switch to electrons

The PRC takes note of the decision of the DESY Directorate to switch to e- at or shortly after the summer 2004 shutdown and of their request to discuss the issue a posteriori in the PRC. The PRC understands that the discussion is not academic and that the Directorate will value highly the comments made by the PRC. The PRC acknowledges the very important progress done on HeraII since the last PRC meeting and the steady improvement on luminosity. The PRC notices that there is still a relevant factor to gain mainly on reliability and that the possibility to collect a relevant fraction (200/pb/year for 3 years) of the initially foreseen luminosity is still in the reach. The PRC is of the opinion that there is no need to open today a discussion on a possible change of the main physics goals of the HeraII program: the main run strategy (approximately evenly distributed integrated luminosity in e+ and e- with the two polarizations) is still valid today requiring a switching to electrons. The PRC is confident that the management will resolve this issue of the schedule. The PRC acknowledges the fact that there is no contingency in the integrated luminosity foreseeable for a successful HeraII program in the given time window. The PRC notices that the running of HeraII is still improving with time in a relevant way, implying that the process is still in a learning phase: the integrated luminosity is maximized switching to a new situation (electrons) when the machine has reached reliable running conditions.