DESY Summer Student Programme 2002

Lecture on
Data Acquisition and Frontend Electronics

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— Bibliography —

Books

- Thomas Ferbel, *Experimental Techniques in High Energy Physics*, Addison-Wesley, ISBN 0-201-11487-9 (1987)
- R. Frühwirth, M. Regler, R. K. Bock, H. Grothe, D. Notz, *Data Analysis-Techniques for High-Energy Physics*, Cambridge University Press, ISBN 0-521-63548-9, 2nd edition (2000)
- David Griffiths, *Introduction to elementary particle physics*, John Wiley & Sons, New York (1987) / *Einführung in die Elementarteilchenphysik*, Akademie-Verlag, ISBN 3-05-501627-0 (1996)
- Konrad Kleinknecht, *Detektoren für Teilchenstrahlung*, B. G. Teubner, Stuttgart, ISBN 3-519-23058-5 (1992)
- Donald H. Perkins, *Introduction to High Energy Physics*, Addison-Wesley, ISBN 0-201-12105-0, 3rd ed. (1987)
- K.-H. Rohe, *Elektronik für Physiker*, B. G. Teubner, Stuttgart, ISBN 3-519-23044-5 (1987)
- Fabio Sauli, *Instrumentation in High Energy Physics*, World Scientific, ISBN 981-02-0597-X (1992)
- U. Tietze, Ch. Schenk, *Halbleiter-Schaltungstechnik*, Springer-Verlag, ISBN 3-540-19475-4, 9. Aufl. (1990) / *translated into* Hungarian (1974, 1981), English (1978, 1990), Polish (1976, 1987), Russian (1982), Spanish (1983), Chinese (1985)
- P. Weinzierl, M. Drosg, *Lehrbuch der Nuklear-Elektronik*, Springer-Verlag, ISBN 3-211-80992-9 (1970)

Articles and Conference Papers

- ZEUS Data Acquisition Group, *ZEUS contributed papers to CHEP92*, DESY Preprint 92-150 (October 1992):
  - — C. Youngman, *The ZEUS Data Acquisition System*
  - — L. Wiggers *The ZEUS Trigger System*
  - — D. Gingrich *Initial Experience with the ZEUS Central Tracking Detector Second Level Trigger and Data Acquisition System*
  - — L. Hagge *The Eventbuilder of the ZEUS Experiment*
  - — D. Bandyopadhyay, *The ZEUS Third Level Trigger Hardware Architecture and the Control System*
  - — F. Bénard, *The Use of the ZEUS Offline Reconstruction Code in the ZEUS Third Level Trigger*
  - — F. Chlebana, *A High Speed DMA Extender for the ZEUS Third Level Trigger Silicon Graphics 4D/35S Processors*
  - — R. Teuscher, *Online Background Reduction in the ZEUS Third Level Trigger*
  - — I. Park, *Run Control System of the ZEUS Online Data Acquisition*
  - — H. Kowalski, *Computing at ZEUS*
  - — P. Hallam-Becker, *Use of Code Synthesis in ZEUS. Use of the Gödel Metasynthesizer*
- Frédéric Descamps, Claude Vallée, *The H1 Calorimeters Data Acquisition*, Contribution to CHEP '92, CERN Preprint 92-07, 167–170
- W. J. Haynes, *Experiences at HERA with the H1 Data Acquisition System*, Contribution to CHEP '92, CERN Preprint 92-07, 151–161

- D. Lellouch, L. Levinson, *Offline Data Compression in a Large Experiment*, Contribution to CHEP '92, CERN Preprint 92-07, 884–887
- D. Hoffmann, P.-Y. Duval, C. Vallée, *H1 Calorimeter DAQ Upgrade for HERA-II*,

Weblinks

- ▷ `http://www.ep.ph.bham.ac.uk/user/watkins/seeweb/Intro.htm`
  Analysis of Bubble Chamber Photos
- ▷ `http://www-physics.lbl.gov/~spieler/physics_198_notes/`
  Introduction to Radiation Detectors and Electronics, Lecture Notes (1998)