

**Initial Experience with DELTA** \*, K. WILLE and the DELTA GROUP, IBS, Univ. Dortmund, 44221 Dortmund, Germany - The 3rd-generation synchrotron light source DELTA of the University of Dortmund consists of a 100 MeV linac, a full-energy booster, and a 1.5 GeV storage ring. Commissioning of the linac has been started in October 1994. In March 1995 the first beam was stored in the booster ring. It is designed as storage ring with free choice of ramping curves for the 6 magnet families. The mismatch of the magnetic fields at low energies is compensated computer-aided by a set of empirical corrections. On completion of the vacuum system in February 1996, commissioning of the main storage ring will begin with an energy near 1 GeV. This low emittance machine is particularly optimized to drive Free Electron Lasers in the VUV-range. The first FEL experiment FELICITA I is in the commissioning phase and will be ready as soon as sufficient beam is available in summer 1996. In addition, a superconducting, asymmetric multipole wiggler is presently under construction in industry and will be delivered by end of 1996.

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