

Registration for the Spring-Conference of the
German Physical Society
from 16.3. to 20.3.1998
in **Bochum**

The properties of the extracted beam at ELSA — •M. GENTNER and D. HUSMANN —
Physikalisches Institut; Nußallee 12; D-53115 Bonn

At the accelerator facility ELSA of Bonn University an external electron beam with high duty factor is produced for experiments on hadron physics in the 0.8 to 3.5 GeV range. With the method of slow resonant extraction the pulsed beam of the preaccelerators is stretched to a quasi-continuous beam for the experiments. The properties of the extracted beam, for example the emittance, depend on a number of machine parameters. These dependencies have been studied analytically and with the help of particle tracking simulations, and the calculations are compared with measurements.

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ELFE at DESY: Slow extraction from HERA — ●M. GENTNER for the NUPECC ELFE
AT DESY MACHINE STUDY – KOLLABORATION — Physikalisches Institut; Nußallee 12; D-53115
Bonn

For the study of the central issue of hadron physics, i.e. the question how hadrons and nuclei are built of quarks and gluons, a new accelerator facility named ELFE has been proposed. This accelerator would make electron beams with high duty factor in the 15 to 30 GeV energy range available. A new, cost effective proposal would use the HERA electron ring as stretcher for the pulsed beam of a linear collider linac at DESY. This option has been studied by an international working group. In this talk some important results, like the calculated and simulated beam properties, are presented.

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NuPECC ELFE at DESY machine study - Kollaboration

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