

SEKTIE A

A1 FIRST OPERATION OF PART OF MEA, THE AMSTERDAM 500 MeV HIGH DUTY CYCLE LINEAR ELECTRON ACCELERATOR

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On September 22, electrons were for the first time accelerated in a section of MEA. One day later, a 15 MeV beam was obtained with a duty cycle already five times that of the previous accelerator EVA. Data will be given on performances and their significance.

A2 DESIGN OF TWO SPECTROMETERS (QDMD AND QDQ) FOR INTERMEDIATE ENERGY PHYSICS AT IKO.

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In preparation for the experimental program to be carried out with the 500 MeV electron (or photon) beam from MEA, the linear electron accelerator presently under construction, two large spectrometers are designed, the parameters of which have been chosen to allow for

- a) high resolution ($\sim 1:10^4$) single channel (e,e') experiments with the QDMD spectrometer
- b) large solid angle (17.5 mster) single channel (γ, p) (γ, α) (γ, π) experiments with the QDQ spectrometer
- c) high resolution ($\sim 1:10^3$) coincidence (e,e'X) experiments with both spectrometers

The high resolution spectrometer is of the intermediate image type and will be used also in the energy-loss mode to enable high resolution experiments while still making full use of the high average current primary beam (up to 200 μ A). The optical and technical design of the very large spectrometers will be described.