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DERANDOMIZING BUFFER AND MICROCOMPUTER MEMORY
MAKE A FAST MWPC IMAGE MEMORY

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We have developed the special derandomizing buffer memory which (in connection with a microcomputer DMA interface) makes it possible to use microcomputer memory in DMI mode for MWPC imaging.

The buffer regularizes an input data stream (X and Y coordinates of an event) into a microcomputer memory and practically no data loss occurs. The advance of this approach :

- a) no special fast histogramming memory is needed, b) a resultant image is in the memory space of the microcomputer used and can be immediately processed.

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The Application of Wire Chambers in Mössbauer Spectroscopy

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The constructions and characteristics of wire chambers using for Mössbauer spectroscopies both transmitting and backscattering are described in detail. Two chambers for transmitting type spectroscopy were constructed and tested, the chambers have better energy resolution, higher detecting efficiency and higher counting rate capability of up to 2×10^6 cps in the 14.4 Kev energy region. A system of wire chambers for backscattering type spectroscopy have been made, because two MWPC's with different parameters, the spectra of the conversion electron, resonance scattering γ -ray, K_{α} -ray and their coincidence spectrum can be recorded separately. Some results of the multiple Mössbauer spectra of surface layer of several samples are given.