

SPIRAL SCANNING DEFLECTOR FOR KEV ENERGY ELECTRONS

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A timing processor for keV energy electrons, which is capable to achieve 1 Tbit/s sampling rate and 1 ps resolution in a few 10 ns time interval, will be described. The method employs the GHz radiofrequency spiral scanning deflector, where sequence of keV energy electrons is directly encoded onto the spatial-time content, producing a two dimensional spatial image of the temporal shaped electrons. Results of current theoretical and experimental studies will be presented.

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