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A new position sensitive anode for plasmas diagnostic

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The studies of plasma generated by laser - matter interaction requires detectors able to perform the time resolved imaging of photons and charged particles. Such information are necessary in order to characterize the time evolution of fundamental parameters (like temperature, density, etc.) of plasma. One of the key elements of such diagnostics is the position sensitive anode.

In this contribution we present the study of a new type of position-sensitive anode which will be realized by using silicon planar technology. Starting from the original idea of Vernier [1-6] we performed a several simulations and test in order to design a new structure: a trapezes and stripes resistive anode (TSRA). The new TSRA is a two-dimensional system which can be coupled with one o two stage multichannel plate (MCP) for the particles detection or for photons.

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