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TPA-TCT – Two Photon Absorption - Transient Current Technique

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The Transient Current Technique (TCT) is a very important technique for characterization of unirradiated and irradiated silicon detectors.
In recent years a novel method, the Two Photon Absorption - Transient Current Technique (TPA-TCT), based on the charge carrier generation by absorption of two photons, was developed. TPA-TCT proved to be very useful in 3D characterization of silicon devices and is offering an unprecedented spatial resolution. Currently the first compact TPA-TCT setup is under development at CERN. The status of the setup and first measurements are presented.

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