

## **A table-top Two Photon Absorption –TCT system: Method and Setup**

*Wednesday 23 June 2021 10:20 (20 minutes)*

The Transient Current Technique (TCT) has become a very important tool 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 with unprecedented spatial resolution. The first compact TPA-TCT setup was developed at CERN. In this talk the TPA-TCT method and the CERN setup will be presented.

**Authors:** PALOMO PINTO, Francisco Rogelio (Universidad de Sevilla (ES)); VILA ALVAREZ, Ivan (Instituto de Física de Cantabria (CSIC-UC)); FERNANDEZ GARCIA, Marcos (Universidad de Cantabria and CSIC (ES)); MOLL, Michael (CERN); WIEHE, Moritz Oliver (Albert Ludwigs Universitaet Freiburg (DE)); MONTERO SANTOS, Raúl (Universidad del Pais Vasco); PAPE, Sebastian (Technische Universitaet Dortmund (DE))

**Presenter:** WIEHE, Moritz Oliver (Albert Ludwigs Universitaet Freiburg (DE))

**Session Classification:** TPA-TCT