Contribution ID: **25** Type: **contributed talk**

Timing resolution on a 3D silicon pixel detector

Wednesday 19 February 2020 11:40 (20 minutes)

We report the measurements of time resolution for double-sided 3D pixel sensors with a single cell of 50 {\mu}m x 50 {\mu}m fabricated at IMB-CNM. Measurements were conducted using a radioactive source at -20 and 20 degrees C in a bias voltage range of 50-200 V. The reference time was provided from an LGAD detector produced by Hamamatsu. Results are compared to previous measurements on identical type sensors.

Primary authors: BETANCOURT, Christopher (Universitaet Zuerich (CH)); DE SIMONE, Dario (Universitaet Zuerich (CH)); PELLEGRINI, Giulio (Universidad de Valencia (ES)); KRAMBERGER, Gregor (Jozef Stefan Institute (SI)); MANNA, Maria (Centro National de Microelectronica - CNM-IMB-CSIC); SERRA, Nicola (Universitaet Zuerich (CH))

Presenter: DE SIMONE, Dario (Universitaet Zuerich (CH))

Session Classification: 3D Sensors

Track Classification: hybrid sensors (3D, LGAD)