

## Timing measurements on neutron-irradiated LGADs in epitaxial wafers

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In this contribution we will present the first measurements on neutron-irradiated LGADs corresponding to our 6-inch, 50 $\mu$ m active layer thick, epitaxial wafers run (6LG3). Samples were fabricated using three boron implantation doses, and one energy, for the gain layer definition. Gain, collected charge, acceptor removal constant and timing measurements were carried out on these LGADs irradiated with neutrons at equivalent fluencies ranging from 1e14 to 1e16 atm/cm<sup>2</sup>. The presented results will serve as a stepping stone to select the best technological parameters for the gain layer definition in the upcoming ATLAS-CMS common runs, based on 6-inch epitaxial and Si-Si wafers (6LG3 and 6LG2 technologies, respectively).

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