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# Characterization of passive CMOS strip detectors

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Silicon detectors are currently filling the trackers of largest particle accelerators and colliders. Their radiation hardness, spatial resolution and availability in large volume foundries make silicon the best candidate for tracking detectors. Current experiments such as ATLAS in the LHC and future experiments foresee to populate the innermost tracking layers with silicon detectors. But not so many foundries are capable of fabricating large area silicon detectors with a production line, therefore CMOS foundries are excellent candidates to be explored.

Here we study the performance of passive strip detectors fabricated in a CMOS foundry with a 150 nm technology process and 150 µm thick wafer. The strips have two different lengths with three or five stitching points, produced using two different reticles. It will be presented the electrical characterization, studies with a radioactive source and testbeam results for the passive CMOS strip sensors before and after irradiation. We will demonstrate that stitching strips do not have any negative effect on their performance.

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