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Contribution ID: 5

Type: **not specified**

## **Irradiation study with passive CMOS pixel detector structures on RD50-MPW2 chips**

*Friday 20 November 2020 13:00 (20 minutes)*

RD50-MPW2 is pixel detector prototype fabricated in 150 nm High Voltage CMOS technology at LFoundry. It is a successor of RD50-MPW1 chip developed within RD50 collaboration to study this technology for future experiments. Chips were manufactured on p-type silicon with different initial resistivities and irradiated with neutrons in reactor in Ljubljana. E-TCT and I-V measurements were made with passive pixel test structures. Depletion depth was measured as a function of bias voltage with E-TCT to extract information about effective space charge concentration. Dependence of Neff and detector current was studied as a function of neutron fluence. Measurements were repeated after several annealing steps at 60 C.

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**Session Classification:** CMOS