

Simulation and optimization of RPCs read-out panel used in high-rate experiment

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With the upgrade of the RPCs and the increase of its performances, the study and the optimization of the read-out panel is necessary in order to maintain the signal integrity and to reduce the intrinsic crosstalk. Through Electromagnetic Simulation, performed with CST Studio Suite, new panels design are tested and their crosstalk property are studied.

The behavior of different type of panel is shown, in particular a panel with grounded strips between the signal strips is presented, furthermore a panel with this strip connected through their characteristic impedance to the ground plane is simulated to try to minimize the crosstalk signal.

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