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# iRPC clustering algorithm and hit reconstruction

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One of the upgrades of CMS RPC system is the installation of new chambers - the improved RPC - with a new readout technology, achieving a space resolution along the strip of about ˜2cm, enabling the inclusion of the RPC hit in the CMS muon reconstruction. The main characteristic of the iRPC is the two side strip readout which makes a new clusterization algorithm necessary. The algorithm was developed during the test beams at GIF++ and its implementation at CMS Software is under development. In this poster we present the main idea of the algorithm, the final hit reconstruction in the chamber, and the results obtained in the test beams.

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