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**CBM EXPERIMENT. CHARACTERIZATION STUDIES
OF THE DETECTOR MODULES FOR SILICON TRACKING SYSTEM**

The double-sided silicon microstrip detector prototypes with 50 μm pitch developed together with CiS, Germany, have been characterized in a 2.4 GeV/c proton beam at COSY, Forschungszentrum Jülich, Germany. Data analyses including reconstruction of 1-strip and 2-strip clusters have been performed. We have done the study of charge sharing in the interstrip gap. In particular it was found that there is a charge loss of less than 10 % in the interstrip gap. The calculated signal-to-noise ratio is around 19 for the p-side of the sensor and it is sufficient for hit reconstruction. Also the charge sharing function which allows more precise determination of the hit position in silicon sensor, have been reconstructed.

Keywords: microstrip detector, silicon tracker, charge sharing function, minimum ionizing particle, cluster.