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SRC at BM@N: reconstruction of tracks upstream and downstream the target using the MWPC and Silicon detector systems

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The measurement of Short-Range Correlations (SRC) at Baryonic Matter at Nuclotron (BM@N) for the first time provides information on the nucleus properties after interaction. The coordinate and time detectors located upstream and downstream the analyzing magnet make it possible to determine the charge-to-mass ratio for each fragment.
The total charge in the event is measured by the scintillator counters. The number of tracks and possible combinations of fragments give an idea of the charge of each of them. The number of tracks is determined by the following detectors: GEM (Gas Electron Multiplier), DCH (Drift Chamber), MWPC (Multiwire Proportional Chamber) + Si (Silicon Detector). The charge-to-mass ratio of each fragment is determined using the turning angle in the analyzing magnet, which is measured by the detector systems: MWPC + Si (direct track upstream the magnet), DCH (straight track downstream the magnet).
In this contribution we discuss the track reconstruction algorithm in Si and MWPC detector systems.

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