SILICON TRACKER FOR THE COMPRESSED BARYONIC MATTER EXPERIMENT

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Design of STS and module prototype of silicon micro-strip detector for particle momenta measurements with a resolution of around $\Delta p/p \approx 1$ % are presented. Very high radiation level and inhomogeneous track distribution result in modular construction of the detector stations. The micro-strip detectors are planned to be read out with the help of CBM-XYTER chip. The system requirements include radiation tolerant sensors with high spatial resolution and a fast readout compatible with high-level-only triggers. Concept of the silicon detection system and the R&D on micro-strip sensors as well as front-end electronics for the building blocks of the detector stations are discussed.