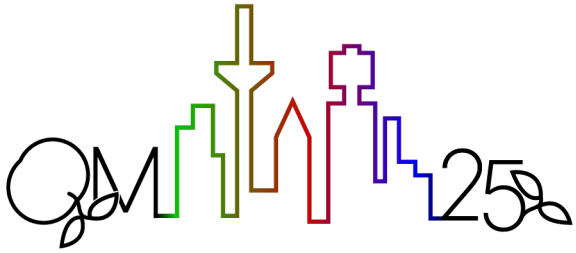

Contribution ID: **742** Type: **Poster**

Forward Spectator Detector for CBM

The development of the Forward Spectator Detector (FSD) of the CBM experiment represents a crucial step towards the successful realization of the CBM physics program –understanding of highly compressed nuclear matter at the FAIR facility currently under construction. FSD is a scintillator-based detector which is positioned at forward rapidity in order to detect spectator nucleons and fragments originating from collisions at the target. The detector is specifically designed to enable accurate reconstruction of the reaction plane and determination of collision centrality at high collision rates (up to 10MHz) provided by the SIS-100 accelerator.
An overview of the design and performance studies conducted for the FSD is provided. These studies encompass extensive prototyping and pre-series testing of the detector, employing a combination of simulations and real data tests to assess the efficacy of various configurations of the detector.

Category

Experiment

Collaboration (if applicable)

CBM

Primary author: DVOŘÁK, Radim

Presenter: DVOŘÁK, Radim

Track Classification: Detectors & future experiments