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## **Methods for centrality determination in heavy-ion collisions with the CBM experiment**

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Centrality is an important concept in a study of strongly interacting matter created in a heavy-ion collision which evolution depends on its initial geometry. Experimentally collisions can be characterized by the measured multiplicities or energy of produced particles at midrapidity or spectator fragments emitted in the forward rapidity region. Relation between collision geometry and experimentally measured multiplicities is commonly evaluated within the Monte-Carlo Glauber approach.

We will present methods for centrality determination in heavy-ion collisions with the Compressed Baryonic Matter (CBM) experiment at the future Facility for Antiproton and Ion Research (FAIR). The multiplicity of charged hadrons is provided by the CBM silicon tracking system (STS) and connected to collision geometry parameters using the Monte-Carlo Glauber model. The energy of spectator fragments is estimated with the CBM projectile spectator detector (PSD). We will discuss possibilities to determine centrality using the PSD and Monte-Carlo Glauber model.

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