

# Quark Matter 2019 - the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions



Contribution ID: 297

Type: Oral Presentation

## The Compressed Baryonic Matter (CBM) Experiment at FAIR

*Tuesday, 5 November 2019 17:00 (20 minutes)*

The Compressed Baryonic Matter experiment (CBM) at FAIR aims to study the area of the QCD phase diagram at high net baryon densities and moderate temperatures using heavy-ion collisions. The FAIR accelerator will provide high-intensity heavy-ion beams up to Au ions in the energy range 2-11 GeV per nucleon. In order to achieve its physics goals and to perform multi-differential measurements of rare probes such as multi-strange particles or hypernuclei, CBM plans to operate at unprecedented peak interaction rates of up to 10 MHz.

Following an introduction into the physics program of the CBM experiment, the talk will focus on recent developments related to the preparation of the experiment, physics performance studies, and detector components tests within the so-called FAIR PHASE-0 program. In particular, the status of the mini-CBM project at GSI, which combines various CBM detector subsystems with a common data acquisition and analysis system, and was operated with high-intensity beams for the first time this spring, will be given.

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**Session Classification:** Parallel Session - Future facilities

**Track Classification:** Future facilities and instrumentation