

## The CBM Time-of-Flight system

The CBM experiment aims at exploring the QCD phase diagram at large baryon densities in the beam energy range from 2 A GeV to 11 (35) A GeV at the SIS100 (SIS300) accelerator of FAIR/GSI. For charged particle identification that is required by many observables that are sensitive to the phase structure like collective flow, phase space population of rare hyperons, fluctuations of conserved quantities, ... a high performance Time-of-Flight (TOF) wall with a granularity of about 100.000 channels and a system timing resolution of better than 80 ps is being built. Part of the wall (~ 10.000 channels) will be installed in the forward hemisphere ( $1.5 < \eta < 1.0$ ) of the STAR experiment at RHIC/BNL during the beam energy scan (BES II) campaign planned for 2019/2020. The performance of the detector system as well as the physics reach will be discussed

### Preferred Track

Future Experimental Facilities, Upgrades, and Instrumentation

### Collaboration

Other

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