Contribution ID: **749** Type: **Poster**

The CBM Time-of-Flight system

Tuesday, 15 May 2018 19:10 (30 minutes)

The Compressed Baryonic Matter (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 (1.0 < eta < 1.5) of the STAR experiment at RHIC/ BNL during the beam energy scan (BES II) campaign planned for 2019/2020. The status and performance of the detector system as well as the physics reach will be discussed.

Content type

Experiment

Collaboration

CBM

Centralised submission by Collaboration

Presenter name already specified

Primary authors: DEPPNER, Ingo-Martin (Physikalisches Institut der Universität Heidelberg); HERRMANN, Norbert (Univ. Heidelberg)

Presenter: DEPPNER, Ingo-Martin (Physikalisches Institut der Universität Heidelberg)

Session Classification: Poster Session

Track Classification: Future facilities, upgrades and instrumentation