

# The Silicon Tracking System of the CBM experiment at FAIR

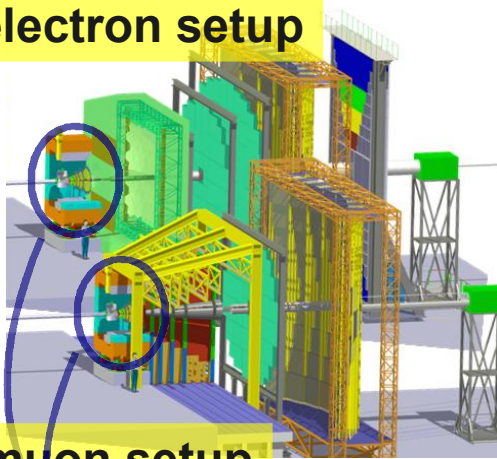
– overview and development progress –

Iurii Sorokin<sup>a,b</sup> for the CBM collaboration

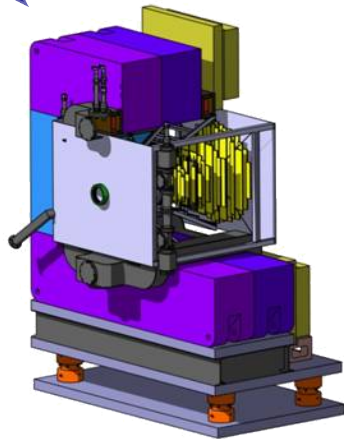
<sup>a</sup>Goethe University Frankfurt

<sup>b</sup>Kiev Institute for Nuclear Research

electron setup



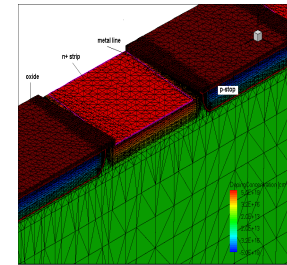
muon setup



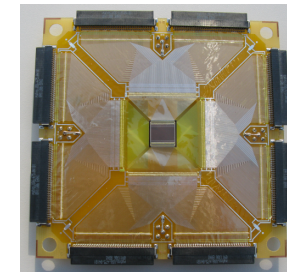
CBM – Future experiment at the FAIR facility (Darmstadt, Germany)

Goal: study the phase diagram of strongly-interacting matter

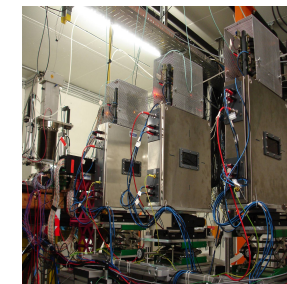
Progress:



Sensor simulations



Detector prototypes



Beam tests

Tracking system:

- 8 planes
- double-sided Si strip detectors
- self-triggered electronics
- required time resolution  $\sim 5\text{ns}$
- rad. hardness  $10^{12}\text{-}10^{13} n_{\text{eq}}$

... and many more!