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# UNDERSTANDING, MODELING AND IMPLEMENTING THE ANALOGUE RESPONSE OF THE SILICON TRACKING SYSTEM OF THE CBM EXPERIMENT AT GSI/FAIR

*Wednesday, January 22, 2025 4:00 PM (30 minutes)*

A method for simulating the functioning of analog electronics of detector modules based on double-sided microstrip silicon sensors of the Silicon Tracking System (STS) of the CBM experiment has been developed. The method uses the LTspice analog electronic circuit simulator. It provides the ability to simulate the signal charge and its distribution between the detector components, as well as the frequency response of the STS detector module. The simulation results indicate the suitability of this method for validating the characteristics, optimizing the parameters and improving the operation of the STS modules, and the possibility of using it for monitoring the STS during the operation of the CBM experiment.

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