

CMOS Strip Chip Simulation with RASER

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The CMOS strip sensor is a key component of the CEPC Inner Tracker. By extending the Python-based framework RASER (Radiation SEmiconductor), we have simulated the complete CMOS Strip Chip (CSC). First, we evaluated its electrical performance, including capacitance, leakage current at operating voltage, and the strip's weighting potential. Next, we simulated the CMOS readout integrated circuit, which includes components such as the amplifier, comparator, and buffer. Finally, we simulated the response of the CSC as a detector using laser and radioactive sources.

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