

## **R&D of MAPS for the Super Tau-Charm Facility(STCF)**

*Monday, June 17, 2024 10:00 AM (15 minutes)*

A MAPS based inner tracker is proposed for the Super Tau-Charm Facility, a next-generation high-luminosity electron-positron collider operating in the tau-charm energy regime. In order to satisfy the challenge of high luminosity, high event rate, and the high tracking performance of benchmark physics programs, the inner tracker has to be of low power consumption, low material budget and provide precise measurements of the hit position and arrival time, with a resolution of better than 30um and 50ns, respectively. Prototypes of the STCF MAPS chips have been designed with three different processes, 180nm, 130nm and 90nm CIS technologies. The latest R&D status of the STCF MAPS will be presented in this report.

### **Type of presentation (in-person/online)**

in-person presentation

### **Type of presentation (scientific results or project proposal)**

Presentation on scientific results

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