

10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



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Type: Poster

sPHENIX MAPS prototype test beam results

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The sPHENIX MVTX detector will be a state-of-the-art monolithic active pixel (MAPS) vertex detector, used by the sPHENIX collaboration, which will allow the study of heavy flavor physics within heavy ion collisions at RHIC. The detector is at an advanced stage of testing with several test beam activities having taken place through 2019. Three test beams have been performed since 2018 to evaluate the physics readiness, the integration of the system with other detectors within sPHENIX (both using four staves, two readout boards and one front end link exchange), and the demonstration of the full readout capability of the minimal detector segment (using eight staves, eight readout boards and one front end link exchange) is expected to be complete by the end the summer of 2019. The results of these tests are being used to drive the collaboration to production-readiness in late 2019 while simultaneously evaluating the track reconstruction software that will be used within the heavy flavor environment experienced by the MVTX.

Collaboration (if applicable)

sPHENIX

Track

New Experimental Developments

Contribution type

Poster

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