



Contribution ID: 12

Type: **not specified**

Validation of Results of 2S Modules in Test Beam

Thursday 8 May 2025 09:50 (25 minutes)

In this work, we present a toolkit, wrapped around Allpix, that can be used to study the performance of the HL-LHC CMS Outer Tracker 2S modules. The toolkit generates events with tracking particles targeted at a slice of the user defined geometry of 2S modules and then forwards the resulting Allpix output to a front-end emulator that performs the full hit digitization chain. This presentation will review the present status and capabilities of the framework, along with a validation study to beam test data. Future use cases in both beam tests and standalone Phase 2 CMS setups like the Cosmic Rack will also be outlined.

Will the talk be given in person or remotely?

Remotely

Author: MASTRONIKOLIS, Andrew (Imperial College (GB))

Presenter: MASTRONIKOLIS, Andrew (Imperial College (GB))

Session Classification: Applications and studies

Track Classification: Applications & Studies