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Comprehensive Full-Power Testing of Demonstrator System for the High Granularity Timing Detector

Thursday, 30 October 2025 15:00 (20 minutes)

The High Granularity Timing Detector (HGTD) is a timing detector designed to mitigate pile-up effects in object reconstruction, arising from increased luminosity in the ATLAS Phase-II upgrade. The demonstrator system is a prototype system incorporating all key components of the HGTD project, developed to validate critical aspects of system integration. Installation and commissioning of this demonstrator system has been on-going since 2024 and was fully equipped with 54 modules, enabling the execution of the full-power test. Performance of the modules and prototype electronics will be presented.

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