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## Precision Timing Detectors: Unlocking the Potential for Discoveries at the LHC and Beyond

*Tuesday 9 January 2018 15:40 (20 minutes)*

Precision timing detectors have the potential to transform event reconstruction in high energy physics experiments, especially at the LHC where pileup will significantly deteriorate the physics performance. I will be presenting current studies on particle identification at the LHC with enhanced detectors capable of delivering approximately 30 ps time resolution for minimum ionizing particles (MIPs). I will cover the sensor technologies being considered for these timing detectors, their performance in beam test experiments, and the current upgrade proposals for different experiments.

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