



Contribution ID: 72

Type: **Poster presentation**

## **Emulation of a prototype FPGA track finder for the CMS Phase-2 upgrade with the CIDAF emulation framework**

*Tuesday 7 June 2016 15:00 (1h 30m)*

The CMS collaboration is preparing a major upgrade of its detector, so it can operate during the high luminosity run of the LHC (HL-LHC) from 2025. The upgraded tracker electronics will reconstruct the trajectories of charged particles within a latency of a few microseconds, so that they can be used by the level-1 trigger. An emulation framework, CIDAF, has been developed to provide a reference to a proposed FPGA-based implementation of this track finder, which employs a Time-Multiplexed (TM) technique for data processing.

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**Session Classification:** Poster session 1

**Track Classification:** Upgrades