



Contribution ID: 6

Type: **Oral**

## Serial powering for the CMS inner tracker detector at High Luminosity LHC

*Tuesday 28 February 2023 10:05 (20 minutes)*

The High Luminosity upgrade of the LHC machine aims at an increase of peak luminosity and to possibly reach an integrated luminosity of  $3000 - 4500 \text{ fb}^{-1}$ . Consequently, the CMS experiment is called for an upgrade to keep up with the new challenges such as unprecedented radiation environment, requiring high resilience, and increased number of events per bunch crossing, requiring higher detector granularity. In this context, the CMS tracker needs to be upgraded in both its Outer and Inner part, fulfilling very stringent requirements. In particular, the Inner Tracker (IT) will make use of the serial powering scheme to provide the about 60 kW required by thousands of modular units. System tests performed on serial powering on the full final size CMS readout chip, C-ROC, will be presented.

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**Session Classification:** Electronics

**Track Classification:** Electronics