## FRONTIER DETECTORS FOR FRONTIER PHYSICS



Contribution ID: 264 Type: Poster

## The electronics system of the TOTEM T1 telescope.

Wednesday, 23 May 2012 11:26 (0 minutes)

Totem is an experiment located at CERN and devoted to the measurement of the proton-proton elastic and total cross section at LHC. TOTEM and CMS foresee a program of common measurements on diffractive physics.

This presentation will be focused on the design of the read-out system of the T1 inelastic telescope, equipped with Cathod Strip Chambers.

We will present the complete electronic readout chain of the Cathode Strip Chambers: the anode and cathode front-end boards, the readout-control card, the architectures of the trigger system and the slow control and fast command distribution chains. Key features of this system are high radiation tolerance and data path, slow control, fast command and trigger compliant with the CMS standards.

We will report on the performance of the full read-out chain in lab and on the LHC beam at CERN.

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Session Classification: Front End, Trigger, DAQ and Data Management - Poster Session

Track Classification: P4 - Front End, Trigger, DAQ and Data Management