Contribution ID: **18** Type: **not specified**

FEASIBILITY OF THE CLIC METROLOGICAL REFERENCE NETWORK

Thursday 16 September 2010 09:20 (20 minutes)

The CLIC project has imposed pre-alignment tolerances on the transversal and vertical positions of the components of 10 μm along a 200 m sliding window. This specification has led to the concept of overlapping stretched wires being used as pre-alignment references and as the basis of a metrological reference network. In order to demonstrate the feasibility of this concept, the problem has been broken down in terms of the management of coordinate systems. This requires the systematic use of absolute calibrated sensors and CMM measured supports. In addition, a more reliable model of stretched wires has been developed. This paper describes the simulated and experimental results from the 140 m TT1 setup and the simulations extrapolated along the 50 km CLIC metrological reference network.

Primary author: Mr TOUZE, Thomas (CERN)

Presenter: Mr TOUZE, Thomas (CERN)

Session Classification: D4,S1, Instrumentation, software and methods

Track Classification: instrumentation, software and methods