



Contribution ID: 24

Type: **not specified**

## Interconnect issues for the CMS 3-D track trigger

*Thursday, 3 May 2012 20:00 (1 hour)*

The 3-D track trigger concept being developed for the CMS upgrade involves interconnections for signals to be transmitted between various layers of sensors and readout electronics. In this design, the two sensitive layers are separated by an interposer, which provides the lever arm for measuring transverse momenta. Such an assembly would require new challenges for bump-bonding of large arrays. Progress in various techniques being investigated for this purpose will be presented. Sequential bump-bonding steps using solders with different melting points will be described. Plans for achieving high yields in assembly will be discussed.

**Primary author:** Prof. TRIPATHI, Mani (UC Davis)

**Presenter:** Prof. TRIPATHI, Mani (UC Davis)

**Session Classification:** Posters