Contribution ID: **26** Type: **Oral presentation**

The design of stable, low-mass support and cooling structures

Friday, 5 February 2010 13:00 (20 minutes)

Designs of stable, low-mass support and cooling structures for intelligent trackers should take into account the additional power dissipation associated with local trigger generation, high speed communications, and power delivery, as well as the spatial distributions of heat sources. For many applications, a modular design can alleviate cooling and support issues and allow parallel fabrication at multiple locations. A proposed design for CMS phase 2 upgrade track trigger formation will be used to illustrate the extent to which design requirements are specific to intelligent tracking, ways in which those design requirements might be met, and implications for local tracker geometry, material selection, structural stability, and the material budget.

Primary author: Dr COOPER, William (Fermilab)

Presenter: Dr COOPER, William (Fermilab)

Session Classification: System integration

Track Classification: System integration