

Radiation Testing of electronic components and systems for the LHC experiments and machine : summary and future

Wednesday 27 September 2006 16:20 (25 minutes)

A statistical summary on 6 years radiation testing for the LHC machine and experiments will be presented. The data shows that radiation tolerance assurance to cumulative damage effects was taken into account as an engineering constraint in a rather early stage in the project. The issue of Single Event Errors was only recognized as major issue at a much later stage in the project and this resulted in a sharp increase in proton beam testing in dedicated facilities at Université Catholique de Louvain and the Paul Scherrer Institute. Presently, the requests for dedicated radiation testing are reducing because series produced electronic equipment is being installed in the LHC. However, the requests may well rise again when the R&D for radiation hard semiconductor devices for the LHC upgrade gets to full swing. The suitability of the presently used radiation facilities for this task will be assessed.

Primary authors: FACCIO, Federico (CERN); WIJNANDS, Thijs (CERN)

Presenter: WIJNANDS, Thijs (CERN)

Session Classification: Poster sessions