Contribution ID: **224** Type: **Parallel Talk**

Sensitivity of the LHC Experiments to Extra Dimensions

Thursday 26 July 2007 17:30 (20 minutes)

In the late nineties several authors suggested that the extra dimensions predicted by string theory might lead to
observable effects at high energy colliders. The ATLAS experiment which will start taking data at the LHC in 2007
will be an excellent place to search for such effects. A large set of models within the ADD or the Randall Sundrum
geometries has been studied in ATLAS. These models predict a variety of signatures: jets and missing energy from
direct graviton production, high mass tails in dilepton and diphoton production due to virtual graviton exchange,
production of Kaluza-Klein excitations of standard model particles, etc. The sensitivity of ATLAS to these signatures
will be presented.

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Session Classification: Alternatives 2

Track Classification: Alternatives