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## **GEANT4 Physics Evaluation with Testbeam Data of the ATLAS Hadronic End-Cap Calorimeter**

*Thursday, May 29, 2008 2:40 PM (20 minutes)*

### **Summary**

The validation of GEANT4 physics models is done by comparing experimental data from beam tests of modules of the ATLAS hadronic end-cap calorimeter with GEANT 4 based simulations. Various physics lists for the simulation of hadronic showers are evaluated. We present results of studies of the calorimeter performance parameters, such as energy resolution and shower shapes, as well as results of investigations of the influence of Birks' law and of cuts on the time of development of hadronic showers.

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**Session Classification:** Simulation

**Track Classification:** Simulation