

**Contracts Final Presentation 19-20 Feb. 2004**

**1. Title of the presentation**

Implementation of Hadronic cross-sections dataset in GEANT4

**2. Speaker**

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**3. Abstract**

The GEANT4 Hadronic data set (G4HDS) has been developed and implemented in the framework of the hadronic model verification activity of GEANT4. G4HDS is composed by a set of classes to archive and retrieve stored data in a formatted directory-file structure. The dataset is intended to help the user to check, select, add and verify experimental data for hadronic cross-sections. G4HDS has been filled with a selected amount of experimental data, and can be expanded in principle with no limitations. G4HDS could be considered a first step towards the preparation of hadronic processes for their simulation in the framework of GEANT4. G4HDS contains a hadronic model test, SpaceHad01. This application has been developed to validate experimental data stored in the G4HDS structure versus hadronic generator models implemented in GEANT4.