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## Heavy Flavour Measurements in pp collisions at 7 TeV with the ALICE Experiment at LHC

## Content:

C. Zampolli for the ALICE Collaboration

ALICE is the LHC experiment dedicated to heavy-ion collisions. It will mainly concentrate on the study of QCD strongly-interacting matter in a high energy density dense deconfined state, as the one expected to be formed in Pb-Pb collisions. One of the key tools in this respect are heavy flavour and quarkonia measurements. Due to the fact that heavy flavours are mainly produced during the initial hard collisions, they will serve as an essential probe of the early phases of the evolution of the system. Moreover, the study of heavy flavours will offer the possibility to investigate effects like the energy loss and the hadronization mechanisms in the hot and dense medium formed in heavy-ion collisions. The current status of the rich heavy flavour program of ALICE will be presented. The shown results will cover the 2010 7 TeV pp data to be used as an essential baseline for heavy-ion, and per se to test pQCD calculations. The various decay channels of the open heavy-flavour analyses will be discussed, together with the results obtained for heavy quarkonia. The talk will focus on the study at midrapidity, with some hints at the ALICE heavy flavour perfomance at forward rapidities. Perspectives for the first Pb-Pb run will be discussed.

Primary authors: Mrs. ZAMPOLLI, Chiara (CERN & INFN)

Co-authors:

Presenter: Mrs. ZAMPOLLI, Chiara (CERN & INFN)

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