IFAE2010 Incontri di Fisica delle Alte Energie "Sapienza" Università di Roma - Dip. di Fisica Roma, 7-9 Aprile 2010



Early-data measurement of J/ $\Psi \rightarrow \mu^+ \mu^-$ decays with the ATLAS detector at the LHC

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INFN

*Study trigger and muon offline reconstruction efficiencies and performance

*Perform physic measurements involving muon decay channels



EVENT INFORMATION Run Number, Event Number, Luminosity Block

MONTE CARLO TRUTH

Kinematics, Production, Vertexing, Parameter extrapolation from Interaction Point to Muon Spectrometer

INNER DETECTOR TRACKS

Kinematics, Number of Hits on Subdetectors (Pixel, SCT, TRT), Parameter extrapolation from Interaction Point to Muon Spectrometer

MUON OFFLINE RECONSTRUCTION

Kinematics, Isolation energy, Track parameters & quality, Number of Hits on track in Muon Spectrometer detectors (MDT, CSC, RPC, TGC)

TRIGGER

Trigger menus, L1, L2 & EF objects, Sector Logics, Coincidence Hits, Timing

