



# LHC Seminar

SPEAKER: Marco Pappagallo (University of Glasgow (GB))  
TITLE: **Studies of b hadron properties at LHCb**  
DATE: Tue 05/02/2013 11:00  
PLACE: TH Conference Room

## ABSTRACT

Hadrons are systems bound by the strong interaction, which is described at the fundamental level by Quantum Chromodynamics (QCD).

While QCD is well understood at high energy in the perturbative regime, low-energy phenomena such as the binding of quarks and gluons within hadrons are more difficult to predict.

High precision measurements are most useful to test the reliability of several models and techniques, such as constituent-quark models or lattice-QCD calculations, into predicting the mass spectrum and the properties of the hadrons.

We report the discovery of two excited b-baryons and the recent results on the masses and properties of the ground-state and the excited hadrons reconstructed in  $1.0 \text{ fb}^{-1}$  of integrated luminosity recorded by the LHCb experiment in 2011.