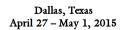
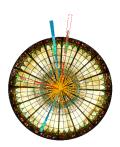
## DIS 2015 - XXIII. International Workshop on Deep-Inelastic Scattering and Related Subjects







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## Study of the Lambda\_b decay properties with the ATLAS experiment

The ATLAS detector at the LHC is collecting - among others - a large statistics of Lambda\_b decays, allowing the study of production, decay modes and decay properties of this b-flavored hadron. This statistics is what allowed one of the most precise measurements of the Lambda\_b lifetime. We will review ATLAS' latest results on the decay properties of this baryon, including new decay modes and measurement of the parity violating asymmetry parameter alpha\_b in Lambda\_b -> Lambda J/psi obtained from the study of angular correlations in the p pi- mu+ mu- final state. The measurement is compared to predictions based on perturbative QCD and heavy quarks effective theory.

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**Track Classification:** WG5 Heavy Flavours