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## Inclusive jet production cross-section and kinematics in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector

*Saturday 24 July 2010 15:00 (17 minutes)*

Making use of the excellent calorimetry of the ATLAS experiment, the first measurement of the cross-section for inclusive single-jet and di-jet production in proton-proton interactions at  $\sqrt{s} = 7$  TeV will be presented. The corrected and unfolded spectrum for high- $p_T$  jets in pp collision at a center-of-mass energy of 7 TeV will be described. Special emphasis will be given to the discussion of the initial understanding of the jet energy scale. For the di-jet system, additional corrected distributions will be shown, including the delta phi distribution between the two leading jets in the transverse plane. Comparisons will be made between jets reconstructed using charged tracks and calorimeter jets to study fragmentation effects.

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**Session Classification:** 03 - Perturbative QCD, Jets and Diffractive Physics

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