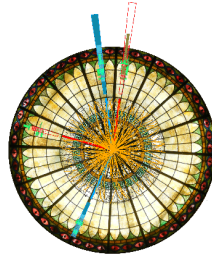


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## Measurements of Drell-Yan transverse momentum and vector boson plus jets properties with the ATLAS detector

Tuesday, 28 April 2015 08:55 (25 minutes)

The ATLAS Collaboration has performed precision measurements of the transverse momentum of the  $Z/\text{gammaboson}$  and the angular correlations of the Drell-Yan lepton pairs with the  $\phi$  observable, in different di-lepton invariant mass and rapidity regions. These measurements are sensitive to soft resummation effects and hard jet emissions for small and large momentum transfers, respectively, probing QCD in a unique way. Production of jets in association with a vector boson is an important process to study QCD in a multi-scale environment. The cross section, differential in several kinematics variables, have been measured with the ATLAS detector in 7 TeV proton-proton collisions up to high jet multiplicities and compared to state-of-the-art QCD calculations and Monte Carlo simulations.

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