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## Measurements of W and Z boson production in Pb+Pb collisions at 2.76 TeV with the ATLAS detector.

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Collisions of lead nuclei at the LHC allow study of the deconfined phase of QCD matter at unparalleled temperatures and energy densities. The use of leptonic observables is particularly appealing as a consequence of their electroweak nature, allowing them to traverse the strongly-coupled medium essentially unaffected. W and Z bosons, observed through their semi-leptonic decay channels, may serve as a proxy for investigating phenomenological processes associated with particle interactions in the QCD medium as well as exploring hitherto unattainable regions of nuclear PDFs. The yields of these bosons in heavy ion collisions can be used for sensitive tests of binary scaling. This presentation will describe measurements of the W boson using single muon decay, and measurements of  $Z \rightarrow ee$  and  $Z \rightarrow \mu\mu$ , both performed with nearly  $150 \text{ nb}^{-1}$  of collision data collected at a center-of-mass energy per nucleon pair  $\sqrt{s_{NN}}=2.76 \text{ TeV}$  with the ATLAS detector during the 2011 heavy ion run.

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