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**Latest results from the ATLAS Experiment at the LHC**

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The ATLAS experiment has completed its first data taking run in 2010 with proton-proton collisions at 7 TeV center of mass energy after accumulating about  $45\text{pb}^{-1}$  of integrated luminosity, as well as about  $10\mu\text{b}^{-1}$  of Pb-Pb collisions. After a winter shutdown, the LHC will resume running in about March of 2011, perhaps at slightly higher center of mass energy. As with any new detector, it is essential to demonstrate that it is working well, and these first results will provide ample evidence of that, as we “rediscover” the Standard Model. In addition, I will present the results of searches for new physics that in a number of cases have already provided the world’s best limits. I will end by discussing the future prospects for high energy and high luminosity running at the LHC.