The ATLAS experiment, the past, the present and the future

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The ATLAS experiment has been idealized in 1994, and built over a period of about 10 years. It is an ambitious project that required years of preparation and the participation of many different institutions for its success. In operation since the start of the Large Hadron Collider, the experiment explores the frontier of particle physics searching for the Higgs boson, supersymmetry, and dark matter to name a few subjects. It is a multipurpose detector and also used for the study of nucleus-nucleus and proton-nucleus collision. The ATLAS experiment is a collaboration of about 3,000 physicists from many institutions that contribute to its daily operations and data analysis. The collaboration is now looking towards the upgrade of the detector to cope with the planned higher luminosity operations of the LHC. In this presentation we will give an overview of the many phases of the detector, a short summary of the current results, and some of the plans for the upgrade of the detector. In particular we will discuss the need for the development of radiation tolerant electronics to allow for a faster data throughput operations.