Abstract Submitted
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Physics reach of the ATLAS experiment during the first LHC run MATT DOBBS[1], Lawrence Berkeley National Lab — We discuss the ATLAS physics programme for the first year of LHC operation. The layout of the initial (staged) detector will be described, as well as the impact of staging on the physics reach. The main data samples and strategies which will be used to calibrate, align and understand the detector response will be presented. Finally, the physics channels which will be addressed in the first months of operation will be discussed. These include a low-mass Higgs boson, also in view of the possible competition with the Tevatron experiments, and Supersymmetry, for which a striking signal might be observed after only a few months of data taking. The impact of a realistic non-optimal detector performance, as expected at the beginning, will be illustrated in some cases.

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