The ALICE experiment at CERN LHC: status and first results

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The ALICE experiment is aimed at studying the properties of the hot and dense matter produced in heavy-ion collisions at LHC energies. In the first years of LHC operation, the ALICE physics program will be focused on Pb-Pb and p-p collisions. The latter, on top of their intrinsic interest, will provide the necessary baseline for heavy-ion data. After its installation and a long commissioning with cosmic rays, in late fall 2009 ALICE participated (very successfully) to the first LHC run, by collecting data in p-p at c.m. energy of 900 GeV. After a short stop during winter, LHC operations have been resumed; the machine is now able to accelerate proton beams up to an energy of 3.5 TeV and ALICE is ready for starting the data taking campaign at 7 TeV c.m. energy.

After an overview of the ALICE physics goals and a short description of the detector layout, the ALICE performance in p-p collisions will be presented in this contribution. The main physics results achieved so far will be highlighted and the main aspects of the ongoing data analysis will be addressed, with emphasis on meson production whenever possible. In the last part of talk, the ALICE plans and perspectives will be discussed.

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