Detector systems & HEP Applications

Marzio Nessi CERN

Today frontier research in particle physics requires state of the art detectors, of a scale and complexity never attempted before. These detectors combine most of the know techniques for particle detection through matter, make use of very large magnetic fields, are very fast in their response and are confronted with an unprecedented quantity of readout data.

This presentation will give a brief history on how the community has design and then constructed the most recent LHC detectors, using as an example one of the 2 large detectors constructed : ATLAS