

IHEF Bachelor Project 2013 – week 19 t/m 26

Naam van project: Triggering on Super Symmetry

Experiment: ATLAS

Begeleider: Auke-Pieter Colijn and Ingrid Deigaard

Beschrijving project:

At the Large Hadron Collider (LHC) at CERN protons are collided to investigate the smallest constituents of the Universe, the elementary particles. The current model of particle physics, The Standard Model, is being tested and possible extensions are investigated. One of these extensions is Super Symmetry.

In the ATLAS detector proton collisions take place every 25 ns producing too much data to record it all. Therefore a selection is made already before the data is stored, the data taking is triggered. The ATLAS detector has a wide range of triggers.

In this bachelor project the impact of the choice of trigger on Super Symmetry simulations will be studied.

Doel:

In this bachelor project you will gain knowledge on:

- Super Symmetry and what signals we are looking for
- The ATLAS trigger system

The programming will be done in python. Programming experience is recommended, but not necessary.

Week	Activiteit	Opmerking
19		
20		
21		
22		
23		
24		
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26		