

# Boosted particle tagging at the LHC based on large R jet substructure using machine learning techniques.

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## **Abstract**

BEGIN ABSTRACT

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# Introduction

## Theoretical aspects

### 2.1 JETS

### 2.2 THE ATLAS DETECTOR

### 2.3 BOOSTED OBJECTS AND FAT JETS

### 2.4 JET TAGGING

### 2.5 FAT JET SUBSTRUCTURE: NSUBJETTINESS

### 2.6 TMVA CLASSIFIERS

### 2.7 EVENT GENERATORS

## Event generation

### 3.1 EVENT GENERATION CHAIN

### 3.2 SIGNAL AND BACKGROUND EVENTS